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development and attempts to publish high quality research focusing on the role of institutions and public policy, within both a national and international context. *REBE* encourages cross-disciplinary research work of Romanian and foreign scholars.

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THE ENERGY CRISIS AND ITS IMPACT ON ROMANIA'S SMEs

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Elena Raluca CRISTIAN²,
Anca ȘTEFĂNESCU (CRUCERU)³*

Abstract

The electricity and gas price crisis started in Romania and in the European Union as of 2021, which took the country's leadership and the management of state institutions, with responsibilities in the energy field, by surprise. In Romania, this price crisis is only part of a deep energy crisis, which started immediately after 1990 and continued step by step until today. This paper tries to present the factors that pushed Romania in to crisis along with the recent war between Russia and Ukraine. Also, the research shows that the measures taken by the Government to limit the effects of the electricity and gas price crisis are not the helping the consumers, either individuals or companies. The research presents the impact of the energy crisis on the Romanian economy and on Romanian SMEs.

Keywords: *energy crisis, Romanian SMEs, Romanian economy, war, impact, factors*

JEL Classification: H12, O13, P22, P24, P18.

1. Introduction

In the current economic context, after the Covid-19 pandemic, the national energy market is in a continuous transformation of a technological, economic, geopolitical, and climatic nature, this being in the same trend as the international changes taking place at the global and European level. In this context, Romania is forced to position itself in relation to international trends, as well as in relation to geopolitical changes that influence strategic partnerships within the EU.

The conflict between Russia and Ukraine had an impact on and implications for the EU's energy system, causing price instability and energy insecurity around the world. To address the need for inexpensive energy and to consider changing geopolitical realities, the EU and its Member States are dynamically redefining their energy plans. This includes stepped-up efforts to boost gas supplies from the EU's reliable allies. Since the second half of 2021, record-high energy costs have been worsened by the conflict because of Russia using energy supplies as a weapon.

With the advancement of technological progress, the energy sector of every country, regardless of continent, has become one of the most important sectors for the national economy, both at the microeconomic (for each individual economic agent) and

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macroeconomic levels (for all SMEs involved in the production process in each sector or branch of the national economy).

The energy crisis causes economic stagnation, and changes in macroeconomic indicators, both in importing and exporting countries, result in a change in the energy balance, which has a direct impact on the trade balance, the balance of payments, and, ultimately, the well-being of the population.⁴

The redistribution of non-contracted volumes of liquefied gas to the Asian market, where the price has always been higher than the European one in 2021, is one of the main causes of the reduction in natural gas supply on the European market.

The price of liquefied gas on the Asian market in February 2021 was 1.6 times higher than the price at the TTF hub (The Title Transfer Facility is a *virtual trading point for natural gas in the Netherlands*). According to Chinese customs data, China imported 5.4 million tonnes of Liquefied Natural Gas (LNG) from the United States of America (USA) from January to August 2021, which is 4.8 times more than in the same period of 2020.⁵

The current priorities in the energy sector are aimed at correcting dysfunctions and falling behind the EU average: expanding regional and European connectivity of electricity and natural gas transport networks until disruption is eliminated, reducing emissions and progressive electrification of final energy consumption in all sectors of the economy, including the residential environment, and the replacement of physically and morally obsolete technological inadequacies.⁶

2. Energy crisis in the European Union

The greater a country's level of development and industrialization, the greater its long-term consumption of energy resources. The increase in demand by household consumers and SMEs against the backdrop of the government's shrinking supply in the energy market inevitably leads to an increase in price in the medium and long term, resulting in a significant increase in inflation.

Due to concerns about limited gas supplies for the winter months, European energy markets became extremely tight and volatile in the fall of 2021. Fortunately, Europe had a mild winter, but once market concerns subsided, Russia invaded Ukraine. Energy is becoming a factor in the conflict. European gas and energy prices rose in August 2021 as markets panicked over Russian supplies and politicians warned citizens to brace themselves for a harsh winter.

Prices were almost fifteen times more than usual for the season. After Russia announced that it would shut down the crucial Nord Stream gas pipeline for three days on August 31, 2021, to conduct maintenance, gas prices began to rise.

Radu Puiu, in an article from Republica.ro, on August 28th 2022⁷ wrote about the “In addition to the geopolitical factor, the causes that fuelled the energy crisis in 2021:

⁴ Gutium Tatiana (2022), *Criza Energetică: Cauzele și impactul asupra bunăstării populației*, Institutul Național de Cercetări Economice, Republica Moldova, p. 48.

⁵ General Administration of Customs of the People's Republic of China <http://english.customs.gov.cn/Statistics/Statistics?ColumnId=1>

⁶ Strategia Durabilă a României 2030, București, Paideia, 2018. <http://www.ddd.gov.ro/>, p. 51.

⁷ <https://republica.ro/criza-energetica-isi-intinde-tentaculele-asupra-industiilor-europene-ajungand-si-peste-ocean>, Radu Puiu, 28 august 2022.

- France has very low nuclear availability (Electricite de France has decreased its 2023 output projection to 300-330 TWh and is currently experiencing cooling challenges that will further reduce 2022 availability).
- Given the widespread drought conditions, there are historically low levels of hydropower storage from Scandinavia to the Iberian Peninsula.)
- closures of thermal power facilities in Western Europe (including coal, nuclear, and gas reactors with outdated technology.)
- Logistics for the supply of fuel brought on by a confluence of extremely low water levels in the Rhine (e.g., effects on coal deliveries to German power plants) and logistical issues resulting from the conflict in Russia.
- Low wind and solar energy output periods.”

The Versailles Declaration, adopted in March 2022, was an agreement between the leaders of the 27 EU member states to gradually reduce their reliance on Russian fossil resources.

The European Council decided on May 30-31, 2022, to prohibit roughly 90% of all Russian oil imports through the end of 2022, except for pipeline crude oil.

Given the different energy mixes, conditions and circumstances of EU member states, EU leaders have called for:

- a greater variety of sources and pathways for energy supply;
- expanding the usage of renewable energy;
- enhancing the linkages between the gas and electricity networks;
- increasing energy efficiency.

On August 5th 2022⁸, Through a formal process, the Council approved the regulation reducing gas usage by 15%. The political agreement reached in July is followed by the adoption. The regulation went into effect the next day after it was published in the Official Journal on August 8.

Electricity prices are 35% higher now than they were during the same period in 2021, according to EUROSTAT data from September 2022.

EU nations have come to an agreement on a market-correction mechanism that will prevent excessive spikes in gas prices inside the EU and lessen the effects of price hikes on consumers and the economy. Gas transactions will be subject to a tariff cap when and if gas prices reach unusually high levels⁹.

The new regulations will make it possible for energy corporations and member states to buy gas on international markets together. By pooling demand at the EU level, member states would avoid bidding wars and will have more negotiating power when buying gas on international markets. The new law also adds a new pricing benchmark that complements the Title Transfer Facility and ensures stable and predictable prices for LNG transactions (TTF).

On December 19, 2022, the reforms were formally approved by the Energy Council. In light of Russia's invasion of Ukraine and the EU's 2050 climate targets, the leaders of the 27 EU member states decided to gradually reduce their reliance on Russian fossil resources at an informal summit of heads of state or government in March 2022.

⁸ <https://www.consilium.europa.eu/ro/press/press-releases/2022/08/05/council-adopts-regulation-on-reducing-gas-demand-by-15-this-winter/>

⁹ <https://www.consilium.europa.eu/ro/policies/energy-prices-and-security-of-supply/>

The leaders agreed at the March meeting to gradually reduce Russian imports by:

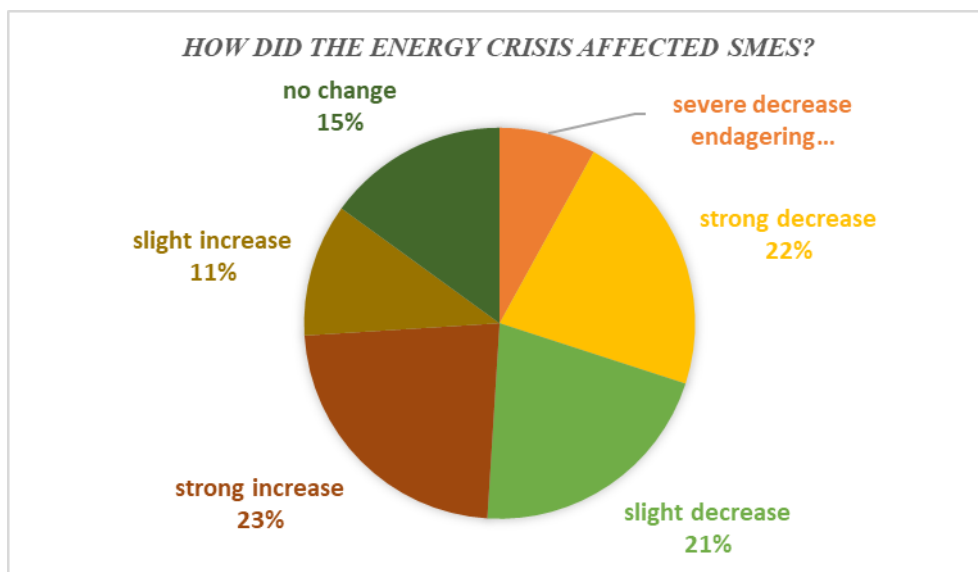
- reducing overall reliance on fossil fuels
- diversifying energy supply sources and routes, including liquefied natural gas (LNG)
- accelerating the development of renewable energy sources and hydrogen
- improving interconnections between EU energy networks; and
- increasing energy efficiency.

Most of the energy used in the EU in 2020 was imported, with Russia serving as the region's primary source of fossil fuels.

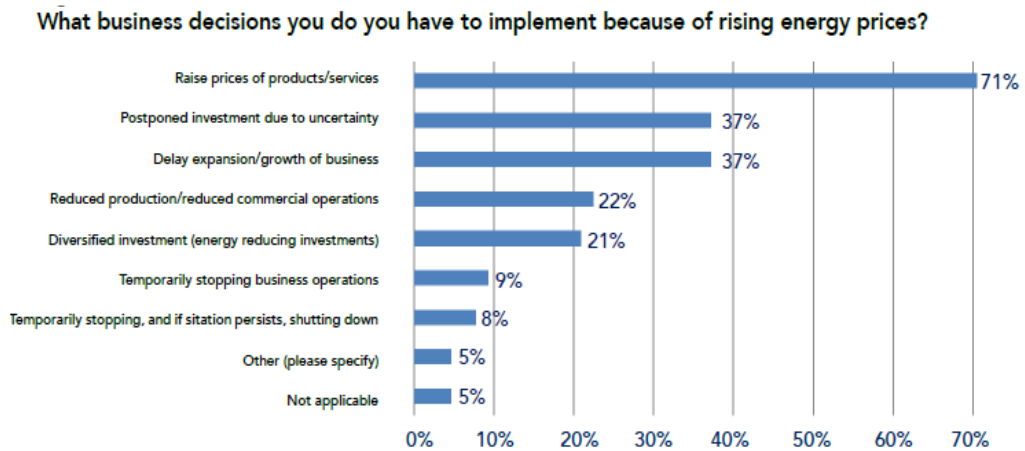
For SMEs all throughout the world, the energy crisis has posed significant obstacles, with particularly detrimental consequences on productivity and profits. Even while some SMEs have been able to maintain profitable operations, rising inflation and input costs indicate that business viability is uncertain, particularly at a time when electricity contracts need to be renewed.

When analysing the activity of European SMEs, some key factors need to be considered, according to the OECD study "EMERGENCY CRISIS IMPACT FOR SMEs," published in the issue of December 2022. Only 1% of the SMEs polled said their operations and overall productivity had not been harmed; 42% of respondents said they had been severely impacted. According to 33% of the respondents, they were able to maintain growth. However, 51% of SMEs saw a decline in both productivity and revenue. Up to 8% of SMEs have experienced a significant decline in productivity and revenues that puts their company's survival in jeopardy.

Figure 1. How did the energy crisis affect SMEs



Source: The authors based their findings on information from the December 2022 release of the Business at OECD (BIAC) SME Survey, ENERGY CRISIS IMPACT FOR SMEs.

Figure 2. What actions SMEs must take because of energy prices rising?

Source: Business at OECD (BIAC) SME Survey, December 2022, page 6 "ENERGY CRISIS IMPACT FOR SMEs."

To deal with rising energy costs¹⁰, the most used business strategy was to immediately and temporarily raise the price of goods and services - 71% of respondents saw no other option. Due to uncertainty, 37% of respondents had to change their long-term strategies and postpone investments, delaying business expansion or growth. One in every five SMEs also reduced production and/or commercial business operations while diversifying their investments (22% and 21%, respectively). If the current situation continues, 8% of SMEs said they would have to temporarily halt operations or close completely.

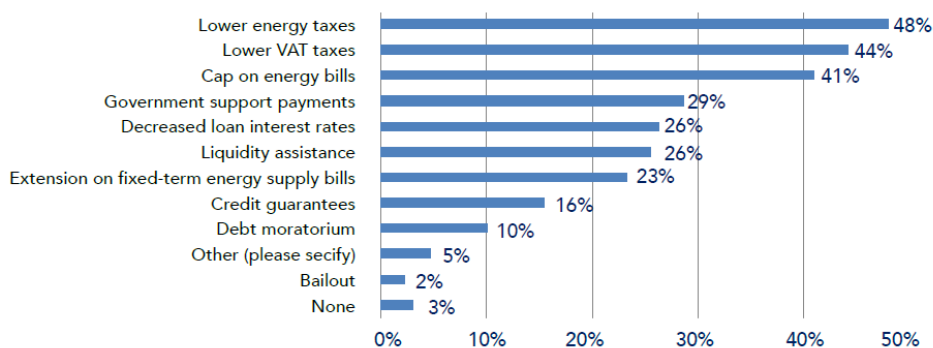
In contrast to 2022, when achieving expansion and concentrating on business consolidation were SMEs' top priorities, in 2023, two out of every three SMEs will place a high premium on cost cutting. Additionally, members concentrate on combating inflation (33%), rising energy prices (30%), increasing employee compensation because of inflation (25%), and addressing labour shortages (23%).

The energy crisis¹¹ has a clear impact on which business choices SMEs are prioritizing. However, there are still almost one third of SMEs (31%) who have indicated a focus on business growth/expansion.

SMEs have given the following responses when asked what form of assistance would be more beneficial to their operations:

¹⁰ ENERGY CRISIS IMPACT FOR SMEs, Business at OECD (BIAC) SME Survey, December 2022, <https://25159535.fs1.hubspotusercontent-eu1.net/hubfs/25159535/website/documents/pdf/SMEs/2022-12-FIN%20Business%20at%20OECD%20SME%20Survey%20-%20Energy%20crisis%20impact%20for%20SMEs.pdf>, p. 6.

¹¹ ENERGY CRISIS IMPACT FOR SMEs, Business at OECD (BIAC) SME Survey, December 2022, <https://25159535.fs1.hubspotusercontent-eu1.net/hubfs/25159535/website/documents/pdf/SMEs/2022-12-FIN%20Business%20at%20OECD%20SME%20Survey%20-%20Energy%20crisis%20impact%20for%20SMEs.pdf>, p. 7.

Figure 3. What financial assistance would be useful for SMEs?

Source: Business at OECD (BIAC) SME Survey, December 2022, page 10 "ENERGY CRISIS IMPACT FOR SMEs."

3. The energy crisis and its impact on Romanian SMEs

According to INSR, Romania had the highest average rate of decrease in energy intensity in the EU between 1990 and 2013, at 7.4%, due to the restructuring of industrial activity following the fall of communism in 1989.

If Romania had design-research, construction-assembly, and manufacturing capacities of thermoelectric power plants with power groups of up to 330 MW, nuclear units of 706.5 MW, hydroelectric power plants with power groups of up to 200 MW, stations and power lines with a voltage of up to 400 kV in 1990, today there are only about 10-20% of these capacities and a large number of commercial companies for design-research, construction-assembly, and manufacturing of energy.¹²

The 2020 energy efficiency goal for Romania was 19%, which matched the country's 500 TWh primary energy demand.

Romania used to be a net exporter of energy, but in recent years it has switched to being an importer on the European market.

Distribution operators on the national electricity and natural gas market made investments totaling 10.5 billion lei between 2018 and 2021, according to official statistics published by ANRE in 2021.

The national companies involved have worked together to secure a portion of the liquidity required to carry out the investment and maintenance programmes at optimal parameters for better operation of the electricity networks, ensuring that the quality of services provided to domestic consumers is not compromised.

Energy costs for distribution network operation become unsustainable, jeopardising the smooth operation of current operational activities. Furthermore, the distribution operators' lack of liquidity is felt throughout the industry, as they are forced to postpone or delay payment terms to service and work providers, with the risk of filing requests to open insolvency procedures, and, as the situation worsens, the risk of a wave of bankruptcies in the area of service providers and, eventually, in the area of distribution operators increases.¹³

¹² Idem

¹³ Confederația Patronală Concordia. Dialog pentru Dezvoltare, *Către o soluție pentru criza din piața de energie*, București (octombrie 2022), <http://www.concordia.ro/>, p. 6.

In accordance with the provisions of the Government Emergency Ordinance No. 81/2019, a state aid programme was implemented in Romania for the 2019-2021 period to support businesses in sectors and subsectors exposed to a significant risk of relocation because of the inclusion of the cost of greenhouse gas emissions in the price of electricity.

Alba Aluminiu (aluminium), Hai Extrusion (aluminium), Hoeganaes Corporation Europe (ferrous metals), Monosuisse (fibres), Yarnea (fibres), and Zlatcup (inorganic chemicals) are the SME's that benefited from aid.).

These businesses have a significant role in the development of jobs in Romania¹⁴ and contribute about 6% of the country's yearly GDP. They also make significant payments to the state budget more than 100 million euros each year. (About 200,000 direct and indirect workers).

In the beginning of 2022¹⁵, According to a study done by the National Council of Small and Medium Private Enterprises in Romania (CNIPMMR), 1 in 10 SMEs are considering closing their doors because of the energy crisis. 98% of the 2260 organisations surveyed for the study said they had seen a rise in their electricity costs.

If, in 2021¹⁶, approximately 66% of companies had electricity bills of up to 2,500 lei, their rate would drop to 40%. However, the rate for companies that had to pay more than 30,000 lei for electricity was only 2% last year, and it has now risen to 7% this year.

In an article from 14 November 2022, Radu Dumitrescu¹⁷ says that “Romania has one of the oldest energy infrastructures in Europe, and fugitive emissions of methane have been documented in most of the oil and gas networks investigated at the national level, ... As the second most important gas-extracting country in Europe, Romania should have a proactive role in the European efforts to combat emissions. The need for taking relevant measures to this end is even direr considering the current efforts to increase Romania's gas exploitation in the Black Sea region.”

On the other hand, 65% of Romania's population does not depend on the gas resource, given that five million households are using firewood for heating¹⁸, therefore showing higher resilience than other European Union countries.

Furthermore, according to an Energy Policy Group study, Romania will reach approximately 87% of total available capacity of natural gas stored in underground storages this year, exceeding the EU target of 80%.¹⁹. The data²⁰ so far shows a

¹⁴ <https://cursdeguvernare.ro/schema-de-sprrijin-pentru-170-de-companii-energointensive-buget-de-15-mld-euro-pentru-perioada-2022-2030.html>

¹⁵ <https://www.zf.ro/companii/impact-criza-energetica-asupra-micilor-antreprenori-1-10-imm-uri-20528611>, Miruna Diaconu, 12.02.2022.

¹⁶ <https://www.zf.ro/companii/impact-criza-energetica-asupra-micilor-antreprenori-1-10-imm-uri-20528611>, Miruna Diaconu, 12.02.2022.

¹⁷ <https://www.romania-insider.com/romania-among-oldest-energy-infrastructure-europe-ngo>, Radu Dumitrescu, 14.11.2022.

¹⁸ <https://spotmedia.ro/stiri/politica/65-la-suta-din-populatia-romaniei-nu-depinde-de-resursa-de-gaz-pretul-va-fi-o-problema>, Magda Gradinaru, 12.10.2022.

¹⁹ https://www.enpg.ro/wp-content/uploads/2022/09/EPG-Policy-Paper_Pregatirea-pentru-iarna_v2.pdf, Energy Policy Group (2022), Cât de pregătită este România pentru aprovizionarea cu gaze naturale în iarna 2022-2023, accessed on 7.11.2022.

²⁰ <https://cursdeguvernare.ro/desenul-politica-energetica-a-romaniei-in-ultimul-deceniu-scaderea-productiei-la-cresterea-consumului-si-importurile.html>, accessed on 7th of November 2022.

reduction in primary energy production of 18.1% in 2020 compared to 2007, and a reduction in electricity production of 9% over the same period. Since 2019, Romania has been a net importer of electricity. According to Bruegel think-tank data, Romania has set aside EUR 6.9 billion from September 2021 to September 2022 to help households and businesses weather the energy crisis. The figure represents 2.9% of GDP and is the seventh highest in the EU²¹.

Following the EU's decision to reduce the demand for natural gas by 15% for the period August 2022-March 2023, data for Romania show that in the first 9 months of this year²², gas consumption was 11% lower as compared to the average consumption for the period 2019-2021. The largest part of the decrease comes from the high reduction of consumption in industry (63%)²³, which is the largest decrease in the EU.

Gas consumption decreased²⁴ more than the average for the EU in half of the member states, with the highest drops occurring in Finland (-53%), Latvia (-30%), Lithuania (-25%), Estonia, Denmark, Sweden (-20%), and the Netherlands (-19%). Germany, where gas usage was 11% lower, and Italy and France both lowered their demand, albeit only little (2% and 1%, respectively). The demand for natural gas increased in four Member States at the opposite pole: Croatia (+8%), Slovakia (+4%), Greece (+3%), and Spain (+2%).

Until recently, there was no policy for supporting industrial consumers. However, in September, the EU agreed on providing aid schemes²⁵ for large energy-consuming companies and SMEs operating in certain sectors of activity. The government²⁶ approved an emergency ordinance in October 2022, by which large energy-consuming companies and SMEs operating in certain sectors of activity will be able to benefit from state aid worth up to 1.5 billion euros during 2022-2030, 150 million euros annually.

State aid is granted in the form of non-refundable financial subsidies, with an estimated 170 economic operators benefiting.

Moreover, SMEs²⁷ will be compensated for 85% of their average monthly electricity consumption. Furthermore, Romania supports a decoupling of the gas price from the energy price in EU negotiations. This could help to alleviate the problems the industry is currently experiencing.

SME associations²⁸ praised the already-agreed-upon measures, such as price ceilings for intramarginal electricity producers and solidarity payments from fossil fuel

²¹ Sgaravatti, G., S. Tagliapietra, G. Zachmann (2021) 'National policies to shield consumers from rising energy prices', Bruegel Datasets, first published 4 November 2021, available at <https://www.bruegel.org/dataset/national-policies-shield-consumers-rising-energy-prices>, accessed on 7 November 2022.

²² <https://cursdeguvernare.ro/industria-din-romania-si-a-redus-consumul-de-gaze-la-o-treime-in-ue-cererea-totala-de-gaze-a-scazut-cu-doar-7.html>, accessed on 7th of November 2022.

²³ *Romania social briefing: Energy crisis and Romania's response*, posted on October 26, 2022, Weekly Briefing, Vol. 55. No. 3 (RO) October 2022, accessed on 7th of November 2022.

²⁴ <https://cursdeguvernare.ro/industria-din-romania-si-a-redus-consumul-de-gaze-la-o-treime-in-ue-cererea-totala-de-gaze-a-scazut-cu-doar-7.html>

²⁵ <https://cursdeguvernare.ro/schema-de-sprijin-pentru-170-de-companii-energointensive-buget-de-15-mld-euro-pentru-perioada-2022-2030.html>, accessed on 7th November 2022.

²⁶ <https://cursdeguvernare.ro/schema-de-sprijin-pentru-170-de-companii-energointensive-buget-de-15-mld-euro-pentru-perioada-2022-2030.html>, accessed on 7th November 2022.

²⁷ *Romania social briefing: Energy crisis and Romania's response*, posted on October 26, 2022, Weekly Briefing, Vol. 55. No. 3 (RO) October 2022, accessed on 7th of November 2022.

²⁸ <https://www.smeunited.eu/news/energy-crisis-risks-pushing-smes-into-recession>

firms, as well as the potential for price reductions for supplying energy to SMEs. They also emphasised once more the urgent need to strengthen and broaden the State aid crisis framework. To prevent needless business failures, the emphasis should now be on the quick deployment of SME support initiatives. If additional emergency energy market intervention can be made in a way that provides supply security without unanticipated increases in demand, SMEs are willing to consider it.

As the latest EU SME Barometer proves²⁹, the current crisis and the high level of uncertainty about future developments are preventing SMEs from investing. Even if the energy crisis spurs investments in energy efficiency and renewable energy, the overall business climate has an impact on such investments.

After the Russian invasion of Ukraine³⁰ in late February, geopolitical unrest and a significant increase in energy prices ensued. The ensuing inflation continued supply chain disruptions, and the effects of the sanctions have compounded the economic uncertainty, lowered the business confidence of European SME's and raised the possibility of a recession. The oppressive economic environment has particularly afflicted Eastern European nations with tighter ties to Russia, such as Bulgaria, the Czech Republic, Hungary, Poland, and Romania.

Mr. Gerhard Huemer³¹, in his article "Impact of energy crisis on SME investment in sustainability" from 11th November 2022 remarks there are some barriers blocking SMEs investments:

- SMEs complain about the lack of regulatory clarity, permitting procedures are often too complex, expensive, and time-consuming.
- a lack of skilled workforces and shortages of necessary materials due to high demand or supply chain disruptions
- Financial instruments alone are not sufficient, SMEs need also an advisory crutch to depend on.

4. Conclusions

Helping SMEs minimise their energy usage over the short and long terms is one of the most efficient methods to assist them mitigate energy prices and supply risks (covering gas, electricity, and oil). These include involving employees and the workforce, who have a unique perspective of how the business functions and where it may be more energy efficient, as well as analysing their business's energy use through energy audits and energy monitoring and management technologies.

Other cost-cutting options include moving forward any plans to invest in new energy efficiency measures and giving high-efficiency technologies preference when buying new or replacement equipment. By putting in place sound maintenance and housekeeping practises, SMEs could also save some money right away on energy costs.

Since the beginning of the energy crisis, the European Commission has proposed several initiatives aimed at assisting not only households but also small businesses.

²⁹ <https://www.smeunited.eu/news/impact-of-energy-crisis-on-sme-investment-in-sustainability>

³⁰ <https://www.consilium.europa.eu/en/policies/eu-response-ukraine-invasion/impact-of-russia-s-invasion-of-ukraine-on-the-markets-eu-response/>

³¹ <https://www.smeunited.eu/news/impact-of-energy-crisis-on-sme-investment-in-sustainability>

More recently, an emergency tool was agreed upon, which states that EU countries may temporarily set a price for the supply of electricity to SMEs to help those who are struggling with high energy prices. Apart from assisting them in reducing their energy consumption, which is one of the most effective ways to assist SMEs in mitigating energy costs and supply risks, the EU operates several SMEs-focused support schemes, including financing, innovation, and advice services.

These plans increasingly prioritise the transition to sustainable energy. Numerous projects that aid small firms in gaining access to capital and enhancing their operating environments are funded by COSME, the programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises. Despite the existing institutions, governments can take the following actions to help SMEs even more:

- support energy audits and advice services
- mandate the implementation of audit recommendations
- support the implementation of an energy management system
- strengthen the energy services market
- provide financial guarantees
- communicate the numerous benefits of energy transition measures
- support the process of transitioning away from fossil fuels
- support employee-led initiatives and behavioural campaigns
- facilitate networking
- ensure easy access to relevant information.

In 2022, there were approximately 536 thousand SMEs reported in Romania. Most SMEs, with approximately 483 thousand as of 2022, are micro-sized enterprises employing up to nine people. According to statista.com, SMEs in Romania contributed approximately 57 billion euros to the economy as of 2022. This year, micro-sized businesses contributed the most to the Romanian economy, totalling approximately 22.31 billion euros.

According to the World Bank's projections, Romania's economy will grow by 2.6% in 2023, which is less than the organization's previous estimate of 3.7% for the year.

By maximising the potential of hydrocarbons and offshore renewable energy sources from the Mediterranean, it is hoped that Romania will become a regional supplier of energy security by the year 2030. Additionally, the development of digital technologies, the diversification of sources and supply routes, the expansion and modernization of storage capacities that are compatible with the use of new gases and hydrogen, as well as the development of interconnection capabilities with neighbouring states, will all help Romania achieve its goal of becoming a regional energy supplier.

Unfortunately, as we have all learned, nothing is permanent, so the future will always be uncertain.

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THE MANAGEMENT OF ROMANIA AS TOURISM DESTINATION IN THE CONTEXT OF UKRAINE'S WAR

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Abstract

Although each tourism sector has been affected by the diversity of economic, political or natural crises, this has not stopped the entire tourism industry to recover and revive every time. The Covid 19 pandemic has generated disastrous effects on tourism, unprecedented from the emergence of mass tourism until the present time. Nowadays, the negative economic effects of Ukraine's war have a major impact worldwide. As tourism flows towards Romania and Eastern Europe are deeply influenced by this context, the potential tourists are looking for safer destinations.

The proximity of the war situation, on the north border of Romania, translates in major concerns in terms of safe and security issues, the number of tourist arrivals in Danube Delta or Bucovina, the closest areas to Ukraine, have registered decreases of 40% compared to 2021³ and the seaside with 50% compared to 2019⁴.

Keywords: war, economic crisis, tourism, Ukraine, Romania

JEL Classification: Z30, Z32, L83

1. The Impact of the Ukraine War on Worldwide Tourism

The military offensive undertaken by Russia in Ukraine poses a negative risk to international tourism. As well as already having affected travel in the Eastern Europe, it has determined a major increase in oil prices and transportation costs, important challenges in this uncertain context.

Beside Russia and Ukraine, the main actors of this political conflict, there are destinations heavily impacted, that are facing decreases in flights since 24 February (compared to the statistics of 2019), such as Republic of Moldova (-69%), Slovenia (-42%), Latvia (-38%) and Finland (-36%) according to Eurocontrol's data. There have been important drops in the Russian bookings of outbound flights in late February and early March, but have since rebounded according to data from Forwardkeys⁵.

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³ <https://www.b1tv.ro/eveniment/turismul-in-delta-dunarii-a-scazut-cu-40-fata-de-2021-as-fi-inchis-daca-nu-as-fi-avut-rezervari-pentru-august-si-septembrie-1178588.html>

⁴ <https://republica.ro/minunea-de-pe-litoral-realitatea-paralela-a-ministrului-turismului>

⁵ <https://www.unwto.org/impact-russian-offensive-in-ukraine-on-tourism>

Although this negative context has profoundly influenced flight booking in previous destinations, European air traffic has grown steadily from middle March to early May. Similar to this, are the increasing demands for intra-European travel, as well as for flights from the US to Europe.

This trend is consistent with the initiatives of travel restrictions reduction in order to normalize and revive travel, for example 36 countries had lifted all COVID 19 travel restrictions since 13 May 2022. But in this situation, the recovery of tourism related activities continue to be, unfortunately, under the influence of this the conflict.

Posing as a threat to international tourism, this could result in considerable changes in travelling to Europe, especially from the USA and Asian source markets, as these markets are known to be more cautious.

Statistics⁶ have shown that, Russia and Ukraine, as source markets, consists of 3% of global spending on international tourism as of 2020. Therefore, a long-lasting conflict could convert into a loss of US\$ 14 billion in tourism receipts globally in 2022.

In 2019, travel abroad spending of Russian arrived at US\$ 36 billion and Ukrainian spending US\$ 8.5 billion, For 2020, the values have registered a decrease up to US\$ 9.1 billion and US\$ 4.7 billion, for the mentioned countries. As tourism destinations, Russia and Ukraine represent 4% of international tourist arrivals in Europe and 1% of Europe's international tourism receipts.

Nevertheless, the inbound and outbound tourism of Russia and Ukraine are to be considered significant especially for neighboring countries, but also for European sun and sea destinations. During the crisis, the Russian market expanded significantly in far-off places including the Maldives, Seychelles, and Sri Lanka.

International tourism has also been affected by the embargo imposed on Russian citizens to visit other destinations, as many countries are relying on Russian tourists, such as Greece, Turkey, Egypt etc.⁷ As a result, all of these countries have undertaken important actions for attracting tourists from other countries, for reducing the negative effects determined by the lack of Russian tourists.

Other nations quickly followed Canada, the EU, the UK, and the US in banning Russian planes from their airspace following the invasion of Ukraine. Russia's response was to impose a ban on both of these nations. The sanctions and air banning have translated in suspending or rerouting of flights for several companies.

The military offensive together with the sanctions and air restrictions imposed will inevitably have a significant impact on the airline and tourism industry⁸. For instance, Aeroflot, Russia's flag carrier has announced the suspension of all international flights except to Belarus, as well as S7, the country's second-largest airline.

Many non-Russian airlines are forced to divert in order to avoid flying through Russian airspace, with some European airlines canceling routes to Asia entirely.

Another example is represented by Finnish airline. Finnair had at first cancelled its flights to Japan, China, and South Korea but has since continued its ventures to Seoul, Tokyo, and Shanghai, taking a course circumventing Russian airspace. Its flights to Osaka and Hong Kong are cancelled until late April.

⁶ idem

⁷ https://airport.nridigital.com/air_apr22/russia_ukraine_tourism

⁸ idem

To conclude broadly, it can be acknowledged that the Ukraine war has had two shock waves. The first one has made everyone stop to watch the consequences of first days of the attacks, especially still being under the psychological impact of pandemics. The outcome was represented by flights canceling, no more travelling to/from Ukraine, the air spaces in the conflict zone were closed, and then followed the travel restrictions of Russian citizens and so on. Afterwards, the neighboring countries have started to receive Ukrainian refugees, the governments of those countries subsidizing the accommodation of these refugees, but the rest of the world has begun traveling and the greater the distance from the conflict zone, the more tourism developed accordingly.

2. The Impact of the Ukraine War on European Tourism

Based on the proximity to the conflict areas, the negative effects of Ukraine's war are registered at a higher level for all European tourism space.

On its way to recovery from the profoundly devastating impact of the COVID-19 pandemic, the European tourism is now facing another major crisis generated by Russia's invasion of Ukraine.

This war is to affect Europe's tourism industry in four specific ways: a loss of Russian and Ukrainian tourists; restrictions on airlines and use of airspace; higher food and fuel costs; major decrease in traveler's confidence and disposable incomes⁹.

This strife has as of now activated a sharp rise in energy prices, which can straightforwardly influence the costs of transportation and tourism services whereas too posturing risks to more extensive consumer demand in Europe. The war has the potential to have a damaging effect on Europe's reputation as a safe travel destination in long-haul markets, as well as generating disruptions in air connectivity¹⁰.

The negative effects are definitely more than it could have been imagined. If it was considered to be a short conflict, the reality shows a different perspective, that this will be a prolonged war situation. There are areas bordering Ukraine that will continue to be affected, but also European well-known tourist destinations, where tourism will not be so strongly influenced by. For instance, in choosing European destinations, people tend to select Southern European countries, including Spain, France and Italy, countries that typically attract the most tourists. Central and Eastern Europe, are close behind, still being popular. For wellness and spa and city breaks, Hungary and the Czech Republic are the destinations high ranked in tourists' demands. Poland is well known for its cities, like Krakow and Warsaw, and villages on the Baltic Sea coast. Romania and Bulgaria are appealing for seaside tourism due to their location on the Black Sea. The Baltic states of Estonia, Latvia and Lithuania in the north, which border Russia and Belarus, attract tourist which enjoy panoramic landscapes and quiet towns with a diversity of options for hiking and biking¹¹.

3. The Effects of the War on Tourism in the Balkans

Effects of the war are to be observed in Balkans as well. Montenegro, which was a leading destination for wealthy Russians, generating attraction from its exclusive

⁹ <https://emerging-europe.com/news/how-russias-war-on-ukraine-impacts-travel-and-tourism/>

¹⁰ <https://etc-corporate.org/event/etc-webinar-impact-of-the-ukraine-war-on-european-tourism/>

¹¹ <https://www.dw.com/en/how-the-war-in-ukraine-affects-tourism-in-eastern-europe/a-61074491>

beach resorts and marinas, has estimated important decrease of the tourism incomes. Its predictions are of lower tourist related incomes, although some Russians have still been arriving through Serbia. Belgrade is one of the few of European airports still open to flights from Russia.

In May 2022, the World Bank has presented the estimations for Montenegro's 2022 economic growth forecast at 3.6% from a previous 5.9%, mainly as a result of the major decrease in the number of high-spending tourists. Tourists from Russia and Ukraine would consist in 15.8% of foreign visitors and 21% of overnight stays, previous to the war situation¹².

According to their initiatives, Montenegro was able to attract tourists from the region, Western Europe, but also from Israel, Kazakhstan, as well as some new markets for Montenegro, such as Saudi Arabia and Egypt.

The Bulgarian Black Sea was another major tourist destination for Russian and Ukrainian tourists. More than that, statistics show that over 350,000 Russians own property on the country's seaside. Officials have declared high negative influence of Ukraine war on Bulgarian tourism.

One important government initiative was adopted for boosting tourism as well as assisting some of the 297,000 Ukrainian refugees, which had settled or passed through Bulgaria, by the end of May. This action included payments of 20 euros per day for food and accommodation given to hoteliers which hosted over 40,000 refugees in seaside resorts.¹³ The lack of clarity regarding the ending of this scheme made it difficult for those participating to take bookings.

4. THE IMPACT OF THE UKRAINE WAR ON ROMANIAN TOURISM

As expected, Romanian tourism was definitely affected by the outbreak of war in Ukraine. Even though the war has restrained tourism flows in East and South-East Romania, after two years of pandemic tourism activity has recorded positive values compared to 2021, the number of tourists has increased with 21.8% than the previous year, and the overnight stays with 17.8%. As Covid 19 pandemic has diminished the tourism flows to Romania, due to travel restrictions, the overnight stays of foreign tourism has now increased with 89.2% higher than 2021¹⁴.

Table no.1.1. Tourism flows indicators in Romania

| Indicators | 2019 ¹⁵ (mil pax) | 2021 (mil pax) | 2022 ¹⁶ (mil pax) | 2022/2019 | 2022/2021 |
|-------------------------------|---------------------------------|-------------------|---------------------------------|-----------|-----------|
| Total Tourists | 13,268 | 9,276 | 11,299 | -14,84% | +21,8% |
| Foreign Tourists | 2,671 | 0,840 | 1,581 | -40,8% | +88,0% |
| Total Overnights | 29,870 | 20,644 | 24,319 | -18,58% | +17,8% |
| Foreign Tourists (overnights) | 5,257 | 1,828 | 3,459 | -34,2% | +89,2% |

Source: <https://seenews.com/news/romanias-tourist-numbers-rise-22-in-2022-813444>

¹² <https://emerging-europe.com/news/how-russias-war-on-ukraine-impacts-travel-and-tourism/>

¹³ idem

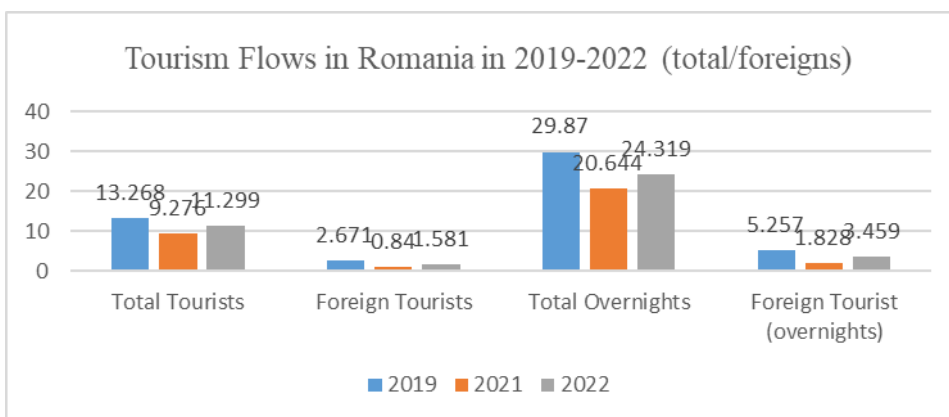
¹⁴ <https://seenews.com/news/romanias-tourist-numbers-rise-22-in-2022-813444>

¹⁵ <https://www.zf.ro/business-travel/turistii-straini-au-ocolit-romania-in-2019-ins-sosirile-au-scazut-cu-4-fata-de-2018-18782854>

¹⁶ <https://seenews.com/news/romanias-tourist-numbers-rise-22-in-2022-813444>

All of these data are not entirely relevant, as they are compared to 2021, another pandemic affected year. If analyzed in comparisons to 2019, all the indicators have negative value.

Taking into consideration the fact that the foreign tourist arrivals in 2019 in Romania have been reduced by approximately 4.08%¹⁷ compared to 2018, it shows that 2022 continues to be affected by pandemic and war crisis. In close proximity to the start of the military conflict in Ukraine, the tourism activity has stopped, especially in East and South – East of Romania.



Source: <https://seenews.com/news/romania-tourist-numbers-rise-22-in-2022-813444>

A study for May-August 2022, published on www.statista.com, showed that 75,5%¹⁸ of respondents have declared that visiting Europe in this summer was not influenced by the conflict, 12,2% haven't made plan to travel due to the war context and for the other 12,4% their vacation plan was affected for various reasons closely related to the war.

Even though travelling has been affected and the military conflict has raised global concern, at the same time, there have been solidarity actions for supporting refugees, fleeing the war. Companies have responded rapidly, to cater for the refugee requirements, joining the brands that helped refugees, therefore creating an online platform through which 1000 free accommodation places were offered for Ukrainians.

Hoteliers and holiday home owners have encouraged this initiative by housing refugees in their accommodation units, providing a safe environment.

Russia's invasion in Ukraine delays the revival of European tourism, particularly in Eastern European destinations. After two years of pandemic limitations and restrictions, the war context continues to set back the recovery of tourism. Despite this situation, local travel and tourism companies are welcoming Ukrainian refugees fleeing the war by providing them shelter, food and transportation. This is also the case of Romanians that have expressed solidarity and assistance to Ukrainian refugees.

In terms of tourism, in 2022, like many sectors, has been confronting with increases prices, high inflation rate, that has translated into a major challenge in

¹⁷ idem

¹⁸ <https://www.statista.com/statistics/1311159/russia-ukraine-war-impact-on-europe-travel-plans-by-country/>

Romania. Another negative consequence of the war is represented by the decrease of population revenues, reconsidering the travelling budget altogether. This was the reason why, many tourists have accessed domestic travel promotions and have used holiday vouchers, being more prices aware.

Particularly, the Danube Delta tourism has been affected by the war, as this region is situated close to the Ukraine border. It has influenced the consumers that were reluctant to travel in proximity of military conflict. Cruises departing from Romania and arriving in Ukraine were suspended, Romanian have preferred to choose cruises that depart for Serbia¹⁹, strategic opposed to the conflict zones.

Alongside the war situation, the high rise of utilities, food and fuel prices added up to this complicated context in the Danube Delta²⁰.

The only one that hasn't been profoundly affected by the war is leisure tourism. Romanian as well as Ukrainians has travelled to Danube Delta reservation, both in the continental Delta, which can be reached by car, and in the center of the Delta, accessible only by boat²¹.

As a result of these consequences, all parties involved in the development of tourism must join their efforts for a more efficient management of tourist destinations in Romania.

One of the first actions of the Romanian government since the onset of military offensive on Ukraine was of an active and anticipatory diplomatic nature, which led to efficient decisions in order to strengthen national security, actions that provide safety for Romanian tourists and especially the foreigners.

The Ministry of Entrepreneurship and Tourism in Romania's National Strategy for Tourism Development for 2023-2025²² aims to:

- Improve the legal framework regarding the destination management organizations (DMO),
- To regulate the form of organizing and funding of DMOs,
- To support the development of participatory management within the DMOs and the professionalization of destination management through a performing public-private partnership;

Also, more than ever, marketing actions in both traditional and online format must be intensified, which will contribute to increasing the notoriety of the Romanian tourist destination at national and international level.

5. Conclusions

As a result of the Ukraine war, Romanian tourism flows have registered a decrease in 2022; the number of foreign tourist arrivals and overnight stays in 2022 has been significantly lower than 2021 and 2019 (year unaffected by the pandemics). At the national level, the negative impact of the war was felt intensely, especially in the first 2 months after the onset of the war. The number of tourist arrivals was also

¹⁹ <https://www.zf.ro/eveniment/delta-dunarii-incepe-resimta-efectele-razboiului-pestre-granita-20603033>

²⁰ http://stiri.tvr.ro/turismul-din-delta-dunarii-afectat-de-razboiul-din-ucraina_915918.html#view

²¹ idem

²² <https://turism.gov.ro/web/wp-content/uploads/2022/11/SNRDT-actualizat-var-pt-HG-2023-2035.pdf>

diminished in the Danube Delta area, which has received during the Easter Holiday a number of tourists similar to the level of 2013.

At the national level, the Romanian government continued aiding HORECA sector, after financing SMEs during the Covid19 lockdown by providing the necessary funding to continue the activity, subsidizing the accommodation of Ukrainian refugees, settling hoteliers for the cost of accommodation and meals for refugees.

For supporting the development of Romanian tourism, in 2022 holiday vouchers were introduced for employees in the budget system. At the same time, the Ministry of Tourism carries out intensive activities to finalize the legal framework of the DMOs activities at the national level.

The development of the country brand and the intensification of the marketing and promotion activities of the tourist destination Romania represent another priority of the Romanian government authorities, in the context of Romania's proximity with Ukraine.

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COST MANAGEMENT IN THE HOSPITALITY INDUSTRY IN THE CONTEXT OF THE ECONOMIC CRISIS - NECESSITY OR STRATEGY

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Abstract

Cost management represents a very smart economic move and it is undoubtedly essential in today's economy tried by the economic crisis due to the pandemic and the war in Ukraine. Most companies have already faced the need to reduce costs, but companies should resort to this strategy without frustrating employees and taking drastic or visible measures that can affect customers. If until now it was an aspect taken into consideration when businesses encountered problems, at the present time it is definitely a necessity.

In addition to the economic crisis, cost management also becomes important in an era of digital transformations. In this context, the HORECA industry, one of the hardest-hit industries during the pandemic, nevertheless experienced a strong development regarding the home delivery segment, a category in which digitalization is accentuated. Many companies have expanded their activity on deliveries in a chaotic way, without studies and development plans. Regardless of whether they were just catering companies with delivery or restaurants that wanted to survive, these companies allocated too much funds, which now burdens their budgets and endangers their business profitability.

Thus, in this context, the present study aims to analyze the impact of cost reduction in public catering units.

Keywords: *food industry, pandemic era, economic crisis, cost management*

JEL Classification: *Z30, Z32 Z38*

1. Introduction

The HoReCa industry is going through its most difficult period since World War II and many operators are finding it increasingly difficult to keep their businesses open. Pandemic has tested operational models and has already made natural selection among restaurants. The only measures that can be taken by entrepreneurs in the industry are those that relate exclusively to their internal activity. Thus, in order to stay afloat, it is vital that all operations are optimized and their resources are used as efficiently as possible³. But all this must be done without affecting quality. This is why more and

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³ Dragoş Panait, consultant HoReCa. <https://www.trendshrb.ro/actual/metode-de-optimizare-si-reducere-de-costuri-pentru-restaurante/>

more companies are turning to business optimization technologies, integration services or routing optimization software.

2. Cost management in the hospitality industry

In the case of a restaurant business, the success of the business lies in the correct management of expenses. Such management can be considered a real challenge. For a good control of these expenses, it is necessary that they are well known, aware and carefully controlled. Restaurant expenses are divided into fixed expenses and variable expenses. Regardless of their nature, today (2023) in an economic downturn raw material costs, expenses, operating expenses, staff costs and even consumables costs can be reviewed.

2.1. Management of production costs

In order to optimise costs, every company needs to set cost management objectives. Cost-cutting measures can be more effective if they are easier to implement and simpler to monitor. Among these effective cost-cutting methods, the following can be applied:

Managing costs in the age of digital transformation - Cost management used to be something that business people only considered when they encountered problems. However, in recent years it has become a standard operating practice that receives constant attention - in both good and bad times. But the failure rate to reduce costs is quite high, even if cost reduction targets remain modest. With the robotization of automated processes or cognitive analytics and technology, cost management becomes a strategic factor with the power to transform the entire industry and fundamentally change the way business is done. However, cost management remains a challenge. The term "digitization" inhibits many HoReCa operators because it suggests replacing human interaction and traditional elements with modern, hard-to-use technologies. Fortunately, this is not the case and a number of measures that can be implemented will provide solutions to the industry's challenges. An eloquent example would be to replace paper menus with QR codes, which can be accessed to view menus. Marketing materials can also be replaced with monitors that can run information about promotional campaigns and offers or opt for booking and ordering software to reduce the need for dedicated departments.

Buying only necessities and nothing more - The purchase of raw materials or products (ingredients, food, drink, etc.) should be done only for what is needed, not in an automatic way that will lead to waste, spoiled products or larger portions than they should be. Keeping a clear record of everything that is ordered from suppliers, quantity purchased and prices will lead to savings and therefore reduce costs. This accounting can be done with management software.

Directing sales of the most profitable preparations, regardless of their raw material costs⁴ - even if some preparations involve a higher production cost, they can often bring more profit. For example, even if it costs more to include steaks or fresh seafood on the menu, they are more expensive and often more profitable than fish only. These things seem obvious, but many managers don't take into account the profit

⁴ <https://www.restograf.ro/metode-eficiente-de-a-reduce-costurile-directe-in-restaurant/>

margins of menu items. And if you don't calculate how much each ingredient used costs individually (to actually determine the cost per cooking of that dish), then you may miss the opportunity to sell guests the most profitable dishes on the menu.

Monitoring the raw material to labor cost ratio - daily ratio analysis that calculates how much percent of income is spent on labor is helpful in lowering costs. This report is especially useful on days when activity is low, days when staff reductions can be made. Better organization of shifts and staff could lead to labor savings.

Knowing the exact cost of preparations - HoReCa companies set cost targets to make a profit, but not all can reach them. In order to reduce costs, it is good to find out whether there are products on the menu where the cost of raw materials has increased and the menu selling price of that product is equal to or lower than the cost of production or, even worse, than the cost of the raw materials needed to make that culinary product.

Preparing ancillary products entirely in your own kitchen - Ingredients or semi-finished products that can be found in the kitchen can cost a lot, but, if they are prepared in your own kitchen, could bring in more profit. A good example is in bakery products or the production of buns.

Monitoring transport costs⁵ - keeping fleet expenses under control is essential for any fleet manager, especially for delivery companies. Modern fleet management and monitoring solutions tailored to the HoReCa sector help digitize and streamline transport and logistics operations, with visible benefits: an overview of vehicle activity and facilitation of real-time decisions.

Cooking without margins and pluses - all restaurants cook quickly and efficiently to serve as many guests as possible. Taking into account some very busy times (lunch times or dinner times) it is necessary to control portion sizes, so portioning is essential in this process and helps to keep costs under control. To reduce wastage and limit when ingredients run out, the optimal amount of food to prepare each shift should be determined based on anticipated sales. Chefs and managers who only make estimates also need statistical data on the restaurant's load level and reports on time periods, thus making estimates closer to reality. Today there is software that can make these estimates.

Regular evaluation of suppliers and supply costs - in keeping the cost of production under control the prices of raw materials offered by suppliers are essential. Increases in the raw material supplier's prices may lead to a search for a cheaper supplier or renegotiation. But the important thing is that someone in the restaurant notices this growth and the restaurant does not sell products for long periods of time without profit. A good restaurant inventory management system can identify pricing errors.

Wholesale purchases⁶ - as in any field, wholesale purchases are much less expensive than retail purchases. Therefore, all non-perishable raw materials with long shelf life, stationery or logistics that the restaurant needs can be obtained periodically, wholesale, and not frequently, in small quantities. This kind of purchasing can lead to savings and therefore lower production costs.

⁵ <https://observatornews.ro/tehnologie/p-activezi-in-horeca-afla-cum-poti-eficientiza-operatiunile-in-3-pasi-490645.html>

⁶ <https://upromania.ro/blog/reducerea-costurilor/>

Outsourcing of ancillary services - It may seem counterintuitive for the restaurant to pay for an extra service, but this may relieve some departments of their workload or reduce the cost of an underutilized workforce. Partner agencies can offer services tailored to the needs of each company, depending on their size and production capacity.

Analysis of costs by nature - variable and fixed costs⁷ - Variable costs are incurred in direct relation to sales and fixed costs are incurred even if sales are zero. In these difficult economic times, there is a need to look for solutions that minimize fixed costs and transform them from fixed to variable costs.

Perform profitability simulations through Break Even Point analysis⁸ - various scenarios (pessimistic/ probable/ optimistic) can be carried out taking into account different uncertainties and plans of activities and priorities can be made based on the 3 scenarios. Cost-volume-profitability analysis involves simulating costs and profit at various volumes of activity.

Hosting events that can bring better visibility to the market - Brand alliances are often used to reintroduce the identity of each brand and attract new consumers.

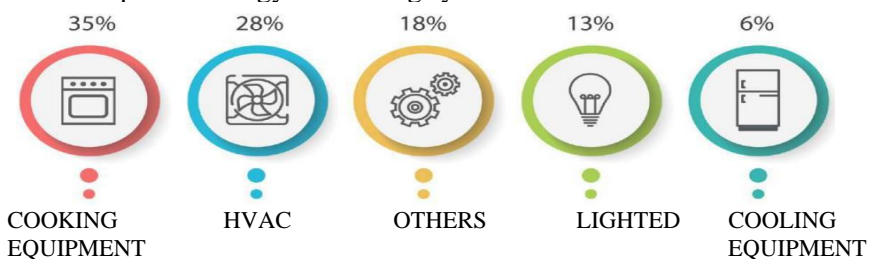
2.2. Management of operating costs

As well as keeping production costs under control at a time when gas and electricity prices have risen significantly, restaurants must also manage the consumption of these scarce resources. The war in Ukraine is of concern in the short and medium term because Europe's gas supply may be cut off and in this case the activity of restaurants may be affected even to the point of closure. Under these conditions restaurants must take measures to reduce gas, energy and water consumption, to limit their carbon emissions and waste, and to direct their activity towards savings.

Crisis after crisis, the hospitality industry has to resist and adapt in the face of challenges. Nowadays we are facing an energy crisis and it is important to reduce consumption and costs in restaurants, bars and cafés. The main indicators that can be tracked would be:

- **Electricity consumption**⁹ - its decrease can be done by: a) the use of energy efficient equipment; b) the use of equipment with thermostat; c) shutting down unused equipment; d) the use of LED light bulbs; e) optimal location of energy-intensive equipment; f) implementation of working procedures to monitor equipment; g) carrying out an energy audit.

Examples of energy consuming systems in a restaurant/kitchen:



Source: <https://servelect.ro/wp-content/uploads/2020/08/Solutii-EE-pentru-restaurante.pdf>

⁷ <https://alinademeter.ro/2020/10/28/strategii-de-reducere-a-costurilor-in-perioade-difcile-sau-criza-episod-1/>

⁸ idem

⁹ <https://ospitalierii.ro/ghid-cum-reduci-costurile-energetice-din-restaurantul-tau/>

- **Water consumption** - water consumption control can be done by: a) the use of low flow spray valves; (b) preparation of leakage faults; c) the installation of low flow aerators; (d) the use of large capacity dishwashers; e) installing toilets with new technologies. These solutions leads to savings of up to 20% of current water consumption;
- **Carbon emissions** can be reduced by using photovoltaic power plants or by installing filters in cooking equipment chimneys.
- **Waste** - can also be reduced by working with local suppliers, reusing certain packaging and recycling either waste, oils or food scraps for compost, etc.

One of the most important conditions that cost-cutting measures must meet is that they do not adversely affect the quality of the products, or generally the value they represent to customers¹⁰. At the same time, the solutions must not have negative effects on business performance indicators of a volume of activity nature. This means that cost optimization solutions must be sustainable.

In addition to the urgent need to reduce costs caused by the Covid 19 pandemic, the war in Ukraine or the economic crisis, HoReCa companies must also act in order to face the competition, companies must develop controlling systems that meet the requirement of customer orientation¹¹. Decision-relevant cost analysis and the target-costing method enable efficient controlling because they contribute to the creation of value for the customer.

On the other hand, HoReCa operators also need to pay attention to cost aspects when making a purchase and to reducing expenses¹². Even the followers of traditional models are willing to learn new things and introduce new ways of saving. In addition, many understand that going green means making substantial savings at the same time. Environmental protection and cost reduction go hand in hand.

A Deloitte survey of 1,000 respondents in the US, Latin America, Asia-Pacific and Europe concluded that cost reduction is a global imperative and although targets are low (i.e., companies aim for at least a 10% cost reduction), the failure rate is high and 63%¹³ of respondents failed to achieve these targets.

Among the main risk factors are considered to be economic recession and fluctuating commodity prices and as many entrepreneurs want to grow their business, perhaps in this recessionary context they should save to grow, so companies use their cost savings as a strategic lever to fund their growth efforts and initiatives.

Reducing costs requires increasing the skill level of workers, improving technical production equipment, manufacturing technologies, administration, management and leadership, material incentives, increasing productivity, etc.

Conclusion

The Covid19 pandemic, the war in Ukraine and the ensuing economic crisis have led to recent increases in fuel, energy and raw material prices, along with the resources needed for production and distribution processes. As a result, companies

¹⁰ <https://cuttingcost.wordpress.com>.

¹¹ http://store.ectap.ro/articole/466_ro.pdf

¹² <https://www.trendshrb.ro/actual/provocari-si-solutii-de-reducere-a-costurilor-in-horeca-in-2021/>

¹³ <https://www2.deloitte.com/ro/ro/pages/strategy/articles/gestionarea-costurilor-in-epoca-transformarilor-digitale.html>

have increasingly focused on cost management strategies as consumers develop cautious behaviors and expect more value for every amount spent.

Developing cost management capabilities is a necessity of modern times and among the top three areas of focus are "forecasting, budgeting and reporting", "new policies and procedures" and "IT infrastructure, IT systems and business intelligence platforms".

The outlook for the coming years continues to be for companies to evolve based on cost efficiency, sustainability and process optimization.

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CONSIDERATIONS REGARDING ROMANIA'S POSITIONING AS A TOURIST DESTINATION FOR HEALTH TOURISM

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Abstract

The health tourism potential of Romania, through natural therapeutic factors, but also through the medical scientific offer, including innovations in the field of geriatrics, centers and clinics of the major cities offering medical tourism, positions Romania on the map of health tourism destinations in Europe.

The offer generated by the balneo-climatic and medical scientific potential is supported by a well-represented accommodation capacity at the national level, which, however, is still undersized from the perspective of hospitality structures with a medical treatment function. At the same time, coastal tourist destinations with impressive accommodation capacity are limited by seasonality and insufficient equipment and facilities for medical treatment and wellness, partly relying exclusively on the appeal of natural healing factors. Also, Romania has a competitive advantage in the anti-aging field that can be developed through better exploitation of authentic products that can be used in the field of health tourism, by expanding the Gerovital treatment network in all spa-climatic resorts.

Keywords: *health tourism, tourist market, wellness tourism*

JEL Classification: Z30.

Analysis of the health tourism market in Romania: supply and demand – evolution and perspectives

The tourist market, part of the services market, behaves like any other market, being coordinated by the sale-purchase processes with tourist products, in a certain geographical space and at a certain time. However, the tourist market is dominated by specific characteristics, which differentiate it from the market of transactions with services, given the specificity of the product, varied and dynamic, which is constantly adapting to the demand. Characterized by the complexity offered by the molecular structure of the tourist product containing both tangible and intangible elements, the tourist market is placed in the area of overlapping the goods market with the services market (Minciuc,2004). The high level of complexity gives the market varied and

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unlimited possibilities of segmentation by imprinting its "fragmented character" (Cristureanu cited in (Minciu, 2004)) included in the multitude of forms of tourism.

The health tourism market is analyzed both from the perspective of tourism demand and consumption in close connection with the motivation related to the need for medical services, but also from the perspective of the offer of tourism services for health and of the medical and wellness tourism product.

The demand for health tourism in Romania

As provided by the classification made by the UNWTO (2010), tourist travel can be classified, in terms of their main purpose, into trips made for personal purposes and trips made for professional purposes. Travel for personal purposes includes two subdivisions: trips made for holidays and recreation which include visiting wellbeing facilities and trips for health and medical care which include medical services provided by clinics, hospitals, sanatoriums or other establishments specialized in the provision of specialized medical services.

Therefore, from the perspective of the purpose of the trip, health tourism involves two categories:

- Wellness tourism
- Travel for health and medical care (medical tourism)

The demand for health tourism is determined by the existence of a need, which, however, must be correlated with the possibility of purchase and the interest of the tourist to obtain these services.

The feature of the demand for health tourism lies in the fact that the need is not always a response to a certain willingness of the tourist, but, in the case of medical tourism, it is the expression of the need for recovery, a certainty of the state of health that imposes a certain motivation, going beyond the range of vacation, relaxation or well-being. Another peculiarity of the demand for health tourism is the fact that in the travel for health are included, especially in the case of medical tourism, the attendants of people who request health tourism services.

Therefore, the demand is segmented into two categories: the recipients of health tourism services and the recipients of tourism services included in the touristic offer for health.

For a complete analysis of the demand for health tourism services, it is important to differentiate between tourists and patients, between people who seek these services by their own decision and those who strictly choose medical services outside the residence for reasons imposed by objective conditions such as: unavailability of treatment, legislation, costs or medical specialization. Travels that incidentally request medical services, called incidental medical tourists and who do not obtain these services through a previous planning, are excluded from the category of health tourists.

The demand for health tourism services is subject to the influence of factors such as: income, culture and availability for tourism, the offer of medical services, the desire to travel, to which can be added other factors related to the peculiarities of the supply space: cultural affinity, specialization in certain therapies, reputation of doctors, distance from demand.

a) Statistical indicators of tourist trips – balance of payments

Statistical data from the analysis of the indicators provided by the Balance of Payments of Eurostat (the Statistical Data System of the European Union) are used to measure the level of demand, which provides information on transactions between residents and non-residents.

The Tourism Satellite Account (TSA) is used to obtain in-depth data and information related to the geographical space covered by statistical indicators. In addition to the Balance of Payments data (in which the data are reported to the permanent residence or centre of economic interest of persons), the Tourism Satellite Account is related to the tourist's residence, for a period of less than one year.

The TSA is a provider of complete information for the tourist activity for health, given that it refers, along with the expenses for medical services provided by clinics or hospitals, also to the services for thalassotherapy, the services offered by the treatment resorts, the services of aesthetic surgery, all but with the condition of medical recommendation.

For a detailed and complete statistical analysis, useful for the entire spectrum of health tourism, there should be a record of the data collected at the level of tourist motivation, correlated with the typology of tourism products. However, such a statistic is very difficult to correlate at international level, given to the strong fragmentation of the tourism market. The statistical analysis is currently carried out by simultaneously researching the data provided by the Balance of Payments from the Eurostat reports (the account "Travels" – "Health-related services" from the category "Personal travel Account") and the data provided by the Satellite Account of Tourism, correlated with the data of the National Institute of Statistics (Vasile Ile), 2019).

At the level of the European Union states, the information obtained from the analysis of the " International trade in services" account and the " Travel personal, health related " account confirm the increasing trend of this category of expenses. Total exports and those related to travel expenses for health registered an increase of 12% more in 5 years, and at the level of Romania, there is an increase in expenses with travel services from 6213 million euros to 1568.7 million euros, registering a 2.5-fold increase, and spending on health travel increased by more than 5 times (Table 1).

Table 1 International trade in services (since 2010) (BPM6) Travel personal, health related (credit, mil euro)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|----------|----------|--------|--------|----------|
| European Union - 27 countries (from 2020) | 148260.9 | 150919.6 | 165302 | 174258 | 182348.1 |
| Travel: personal expenses, of which: | | | | | |
| Health-related | 2171.8 | 1871.3 | 2231.9 | 2375.2 | 2520.6 |
| Romania | 621,3 | 733,3 | 1211,9 | 1353,9 | 1568,7 |
| Travel: personal expenses, of which: | | | | | |
| Health-related | 4.9 | 3.3 | 28.2 | 21.3 | 27.8 |

Source: (Eurostat, 2023)

Regarding the expenses related to personal travel for health, the trend of increasing exports is maintained, at the level of the European Union states, by

approximately 10%, Romania surpassing this trend, through an increase of more than 6 times in exports in 5 years.

The analysis of the statistical data relating to the imports recorded in the debit of the Travel personal expenses account shows an increase in these expenses at the European level by 13% in 5 years, while in Romania, an increase of 39% is recorded (Table 2).

Regarding the expenses related to personal travel for health, there is a trend of increasing imports on European Union states, by over 12% in the period 2015-2019, but Romania registered a reduction in 2019 compared to 2018.

Table 2 International trade in services (since 2010) (BPM6) Travel personal, health related (debit, mil euro)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|-----------|-----------|-----------|-----------|-----------|
| European Union - 27 countries (from 2020) | 121,986.7 | 131,194.8 | 144,165.1 | 151,575.0 | 160,159.2 |
| Travel personal expenses, of which: | | | | | |
| Health-related | 2222.9 | 2424.6 | 2315.4 | 2559.6 | 2719.1 |
| Romania | | | | | |
| Travel personal expenses, of which: | 689.0 | 955.8 | 2,066.6 | 2,360.3 | 2,695.3 |
| Health-related | 0 | 0 | 2.6 | 3.2 | 2.7 |

Source 1 (Eurostat, 2023)

The analysis of exports and imports of expenses related to personal travel for health concludes that Romania is a provider of travel services for health, with a volume of 27 million euros in 2019, while, for imports, respectively the trips of Romanian citizens to other states for health-related services are constant, not exceeding 2.7 million euros in 2019. Therefore, Romania is a provider of services for personal travel related to health, the statistical data not being sufficient to make a ranking or a comparative table between all member states of the European Union.

b) Statistical indicators of tourist trips - tourist demand of Romanian residents

The statistical data provided by the National Institute of Statistics of Romania offers detailed information on the tourist demand of residents according to the main motivations. The analysis of statistical data collected through questionnaires applied to members of Romanian households aged over 15 highlights the evolution of specific indicators such as: the number of medical tourist trips, the expenditure for these trips or the preferred destinations.

The analysis of the statistical information on the number of tourist trips made for medical purposes for the period 2015-2019 reveals a relatively constant interest, considering that the figures register small fluctuations between 500,000 and 600,000 trips, without, however, exceeding the maximum recorded in 2015 (over 700,000 travels). The 2020-2021 period is associated with the Covid 19 pandemic, being characterized by constraints on travel in general and medical tourism in particular, being irrelevant for the purpose of this research.

Table 3 Comparative number of tourist trips: total and medical purpose

| Year | Total trips | Medical purpose trips |
|------|-------------|-----------------------|
| 2015 | 18,922,315 | 713,352 |
| 2016 | 17,367,314 | 505,216 |
| 2017 | 19,058,365 | 634,222 |
| 2018 | 19,094,492 | 570,009 |
| 2019 | 19,976,000 | 614,014 |
| 2020 | 12,069,388 | 223,157 |
| 2021 | 17,861,324 | 393,816 |

Source: made by the authors based on (INS (b), 2022)

Health tourism trips made by residents in the period 2015-2019 (Figure no. 1) are mainly focused on city destinations (with a peak in 2018) and mountain areas (with relatively stable demand), which can be associated with preferences for those two categories of forms of health tourism: medical tourism that corresponds to urban destinations and medical wellness/spa tourism that corresponds to the mountain area. For the rural area there is no substantial demand, while the coastal destination has registered an increasing trend in the last two years.

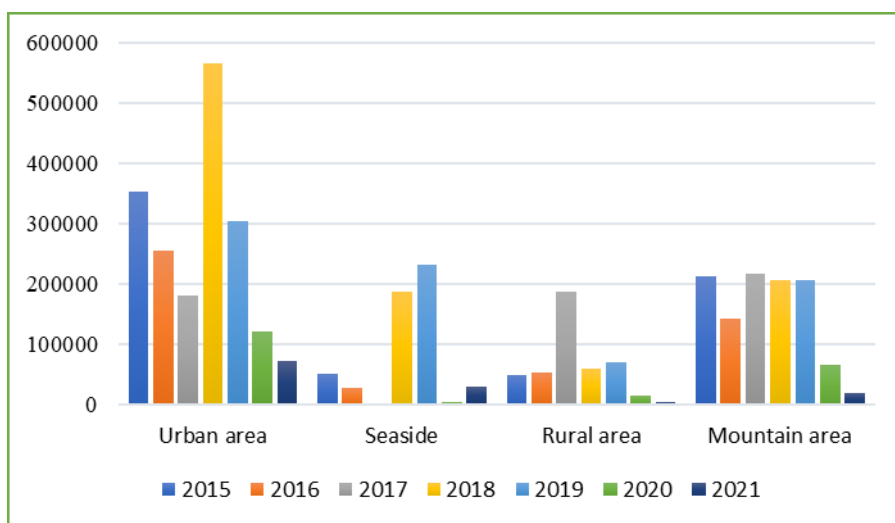


Figure no 1 Domestic medical travel to the main destinations

Source: made by the authors based on (INS (b), 2022)

From the perspective of the types of accommodation categories preferred by Romanian residents in domestic travel for medical purposes (Figure no. 2), the most attractive are hotels and similar accommodation units, with the observation of an increasing preference in 2019 compared to 2018. Accommodation units in the category of campsites, cabins or guesthouses are in a slight decrease, while accommodation with relatives or friends increases slightly in preferences, but is positioned far below the level of hotels. Free accommodation in other types of premises is still a preferred option for health tourists, this occupying the 2nd place after hotels.

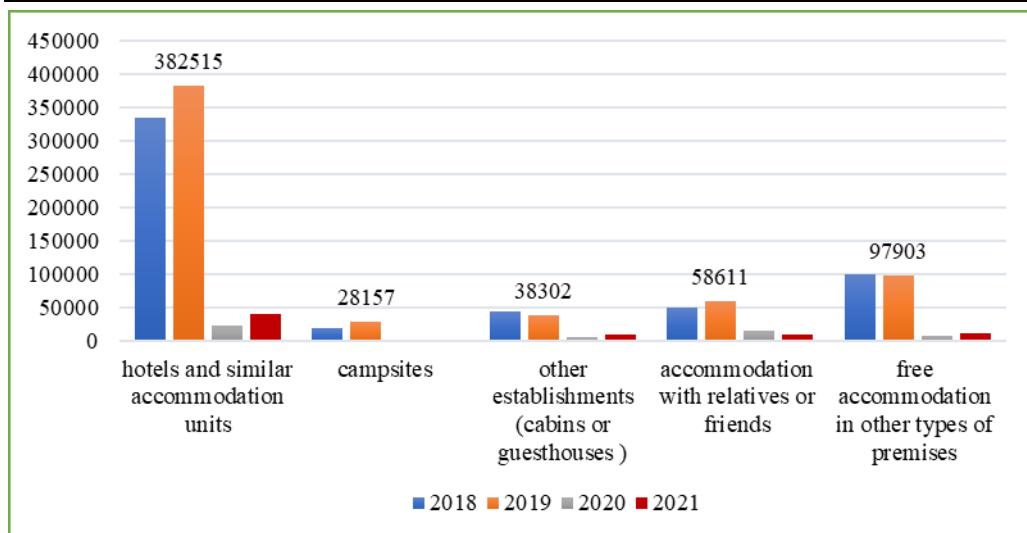


Figure no 2 Domestic travel for medical treatment by type of accommodation, 2018-2021

Source: made by the authors based on (INS (b), 2022)

The presence of hotel-type accommodation in a proportion of over 63% demonstrates the role and importance of accommodation spaces in the tourism product for health, but at the same time, the relatively high share of accommodation in other spaces without payment, including with relatives and friends, warns of the relatively low purchasing power of Romanian tourists, with demand for health tourism.

The offer for health tourism in Romania

In Romania, the offer for health tourism respects the structure of the forms of health tourism, being classified into the supply for medical tourism, located especially in the main cities, medical university centers, and the supply for spa tourism, which includes both the offer of wellness and medical wellness tourism.

Table 4 Existing accommodation capacity (number of places) by types of destinations

| Total number of places | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total | 328313 | 328888 | 343720 | 353835 | 356562 | 358119 | 364507 | 367386 |
| Spa resorts | 35342 | 35786 | 36631 | 36173 | 35643 | 36554 | 36362 | 36643 |
| Resorts in the coastal area | 83353 | 81635 | 80618 | 80665 | 85081 | 85200 | 84794 | 86271 |
| Resorts in the mountain area | 55775 | 57282 | 63921 | 65025 | 64767 | 63943 | 66374 | 66742 |
| Bucharest and the county seat cities | 86565 | 85826 | 87901 | 91800 | 92018 | 90098 | 89657 | 89607 |

Source: made by the authors based on (INS (a), 2022)

Romania has an important accommodation capacity, distributed in destinations such as spa resorts, coastal, mountain areas or county seat cities. The largest share is the accommodation in the coastal area, an important destination for health tourism,

both through the supply of spa treatment for recovery and healing (thalassotherapy, climatotherapy, peloidotherapy), as well as for the wellness one. Out of the total number of existing accommodation places in Romania, the existing accommodation capacity on the coast represents over 23%, the spa resorts add up to 10%, the mountain area 18%, and the cities 24%.

Table 6 Tourist accommodation capacity in operation at tourist destinations (2015-2021)

| Capacity in operation | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|--------------------------------------|----------|----------|----------|----------|------------|----------|----------|
| Total | 81872539 | 83323220 | 87655762 | 89075891 | 88.789.656 | 64040595 | 79191834 |
| Spa resorts | 9136031 | 9321299 | 9852659 | 9845187 | 10075072 | 6798034 | 9167043 |
| Resorts on the coastal area | 9411584 | 8797917 | 9221634 | 9032938 | 9129918 | 7771086 | 8758769 |
| Resorts in the mountain area | 16004784 | 16600153 | 18258593 | 18510155 | 18218169 | 12895299 | 16224148 |
| Bucharest and the county seat cities | 29586854 | 29871346 | 30417360 | 30959939 | 30741036 | 22371705 | 26779366 |

Source: made by the authors based on (INS (a), 2022)

Out of the total touristic accommodation capacity in operation expressed in number of bed places, 11% is represented by the accommodation capacity in the spa resorts, 11% the accommodation in resorts on the coastal area, 20.5% the capacity in the mountain area and approximately 34% the accommodation capacity in operation in Bucharest and the county seat cities.

Comparing the data according to the existing accommodation capacity and the accommodation capacity in operation in the main destinations of interest for health tourism, it is observed a small share of the touristic accommodation capacity in operation of the coastline resulting from the highly seasonality of the offer in this area (11% capacity in operation compared to 23% existing capacity), low seasonality of touristic accommodation capacity in operation in spa resorts (11% capacity in operation compared to 11% existing capacity), a low affected capacity in operation in the mountain area (18% existing capacity and 20.5 capacity in operation), while the city's supply is slightly affected by seasonality throughout the year (24% existing capacity and 34% capacity in operation).

From the perspective of the supply of medical services, the providers of accommodation services in the coastal area who have their own all year round treatment facilities and touristic products adapted to both the medical and wellness offers are in insufficient number to provide consistency to the medical offer in seaside resorts

The health tourism supply for the Romanian seaside area sums up several permanent touristic establishments with health treatment infrastructure localized in Mangalia, Saturn, Neptun, Techirghiol and Eforie Nord resorts (Tabel 7).

Table no 7 Accommodation and treatment providers from resorts located on the Coast

| Tourist resort (Seaside) | Accommodation with treatment bases |
|--------------------------|--|
| Mangalia | <ul style="list-style-type: none"> • Mangalia Balneary Sanatorium • Paradiso Hotel |
| Saturn | <ul style="list-style-type: none"> • Hora, Balada, Sirena Hotels |
| Neptun | <ul style="list-style-type: none"> • Doina Hotel |
| Techirghiol | <ul style="list-style-type: none"> • Techirghiol Balneary Sanatorium • "Sf.Maria" Pastoral Social Center |
| Eforie Nord | <ul style="list-style-type: none"> • Steaua de Mare Hotel Complex • Bran-Brad -Bega Hotel Complex • Europa Hotel • Traian Hotel, • Aqvatonic Med Spa • Mirage MedSPA |

Source: made by the authors based on (balneomedica.ro, tratamentbalnear.ro, bioclima.ro, thrmareaneagra.ro, 2022)

The supply of health tourism is insufficiently developed compared to the touristic accommodation capacity of the seaside area, which makes the destination, contrary to its potential, to have a limited impact in the total supply for health tourism of Romania.

The supply analysis of the touristic reception establishments in the context of the health tourism product is also carried out by identifying the touristic reception capacity by development regions of Romania (Table 8). By comparing the data, the trend of increasing the supply of accommodation in the North-West, Center, North-East, South-East regions is obvious.

Table no 8 Accommodation capacity by Romanian development region

| Development regions Places | Year | | | | | | | |
|----------------------------|---------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| NORTH-WEST region | 32210 | 33848 | 37792 | 40897 | 40154 | 42451 | 44007 | 45188 |
| CENTER region | 68899 | 67496 | 71038 | 70696 | 69113 | 70176 | 71654 | 70848 |
| NORTH-EAST region | 28184 | 28763 | 31170 | 31328 | 31469 | 32585 | 33242 | 33997 |
| SOUTH-EAST region | 100921 | 98769 | 98070 | 103753 | 107908 | 108047 | 108888 | 110571 |
| SOUTH-MUNTENIA region | 29881 | 30347 | 31529 | 30380 | 30246 | 28760 | 28788 | 27931 |
| BUCHAREST - ILFOV region | 21576 | 22242 | 22956 | 23873 | 24294 | 23449 | 24888 | 25551 |
| SOUTH-WEST OLTENIA region | 18821 | 19190 | 21000 | 22244 | 22927 | 21722 | 22867 | 22893 |
| WEST region | 27821 | 28233 | 30165 | 30664 | 30451 | 30929 | 30173 | 30407 |

Source: made by the authors based on (INS (a), 2022)

In the mid term, in the last 8 years, the largest increases in accommodation supply are observed in the North-West region (+40%) and the North-East region

(+18%), while regions such as the South-East, which have the highest capacity, register an increase of only 10% in 2022 compared to 2015. The South Muntenia region registers a slight decrease of 7%. It is noted the increase in the accommodation capacity in the Central, South-western and Northern areas of Romania, regions where health tourism products are also developed, especially in spa resorts with thermal and mineral springs offer.

In addition to the supply of balneo-climatic tourism and medical tourism developed in the main cities, Romania is one of the initiating countries of anti-aging treatments, being at the same time a pioneer of the development of medical tourism products, since the 1970s.

Doctor Ana Aslan developed a method of prophylaxis and treatment of health deficiencies generated by oldness through her revolutionary treatments Gerovital and Aslavital, which she applied, at that time, in an incipient form of medical tourism, at Flora Hotel in Bucharest.

Commonly, the anti-aging treatments, very appreciated at the international level, are approached by the National Institute of Geriatrics and Gerontology in Bucharest, as well as in several other establishments for health tourism from some spa-climatic resorts.

In the same time, in addition to the innovations of Doctor Aslan, Dr. Ionescu-Călinești conceives another product of great impact in the spa treatment, resulting from the peloid extract from the Amara and Balta Albă lakes, called Pell Amar, successfully used in the treatment of rheumatic and dermatological diseases.

Currently, the Gerovital and Pell Amar therapy is reduced to the offer of the Institute of Geriatrics in Bucharest and balneary anti-aging treatments in resorts such as: Băile Felix, Băile Herculane, Amara, Băile Govora, Eforie Nord, Neptun, Mangalia, Saturn, Sinaia, Sovata. At the same time, the dermato-cosmetic products of the Gerovital and Pell Amar range are used in spa and wellness procedures both in the treatment centers of the balneo-climatic resorts, as well as in spa and wellness centers associated with hotels all over the country.

Romania, in addition to the medical and wellness offer for adults, has also developed treatments for children's medical recovery in resorts such as Băile Felix, Băile 1 Mai (medical recovery for children), Băile Olănești (treatment of allergies and aerosol therapy for allergic rhinitis), Băile Govora (respiratory diseases treated with iodized and sulphurous mineral waters), Sovata (salt cave therapy for respiratory diseases), Mangalia and Techirghiol (treatment of locomotor disabilities), along with the treatments of natural salt mines from Turda, Praid, Ocna Dej, Ocnele Mari, Slănic Prahova, Cacica.

The offer of medical tourism of the spa resorts in Romania fits both aspects of health tourism: wellness (including medical wellness) and medical tourism. Romania has destinations of interest for the development of therapies based on natural cure factors, oriented towards various types of tourists: seniors, children, adults, young people, who are looking for healing therapies, or relaxation and health preservation.

*

* * *

Romania's tourism potential, through natural therapeutic factors (bioclimatic, salt mine, peloids, thermal and mineral waters, sea and lake water), but also through the medical scientific research, including innovations in the field of geriatrics and treatment

with sapropelic mud extract, and medical tourism offer from centers and clinics in major cities, places Romania on the map of destinations for health tourism in Europe.

Romania has several exceptional competitive assets through its authentic health products that could be better exploited and used in the field of anti-aging health tourism, by expanding the Gerovital treatment network and sapropelic mud therapy in all spa resorts.

Taking into account the development perspectives of the global health tourism, it requires Romania to adapt to the European policy of promotion and investment in tourism strengthened by strategies assumed both at the level of macro-destinations and at the level of local and regional organizations for the management of health tourist destinations.

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THE INFORMATION SYSTEM – A KEY FACTOR IN GROUNDING DECISION-MAKING IN HOTEL MANAGEMENT

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Abstract

Some companies have gained the ability to make use of information to achieve performance. Managers have understood that they must capitalize on people, information and information technology in order to constantly improve on business performance.

In the recent years, managers have tried rather to use information technology than to manage information, and this focus on technology has happened to the detriment of the people. Even though managers have tried to learn how to handle technology and information, they have not, however, developed a deep understanding of the way in which people's behaviors affect the use of information inside the company.

Keywords: *information technology, hotel management, decision-making, employee behaviour*

JEL Classification: M15, Z30.

1. Introduction

The information systems designed for the management level have some features in common with decision-making systems. The information systems designed for the management level concentrate on strategic information which is crucial for top-level management.

The aim of these systems is to provide, for the decision-making entities on the top level, immediate and easy access to the information that is necessary to reach the strategic objectives of the company.

The top decision-making level needs huge quantities of information from various sources, such as letters, notes, regular reports or reports drawn by other information systems.

These systems need to grant quick and easy access through friendly interfaces using graphical elements.

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2. The information systems

The information systems designed for the management level has, at the conceptual level, a few characteristics such as:

- use of computer networks;
- in the case of the management level, the information system software uses the system of telecommunications, whereas the data base software grants access to the information in its internal or external environment and instantaneous access to interrogations;
- it offers a great variety of information regarding the current state of the company as well as the estimates on its future status;
- The information systems designed for the management level display the possibility of analytically modeling and assessing alternatives for decision grounding systems;
- The information provided with the help of information systems designed for the management level can be presented in the form that the manager desires.

In the recent years managers have tried rather to use information technology than to manage information, and this preference for technology has been to the detriment of the people. Even if managers have tried to acquire know-how on handling technology and information, they have nevertheless lacked a profound understanding of the manner in which people's attitudes impact the use of information in a company.

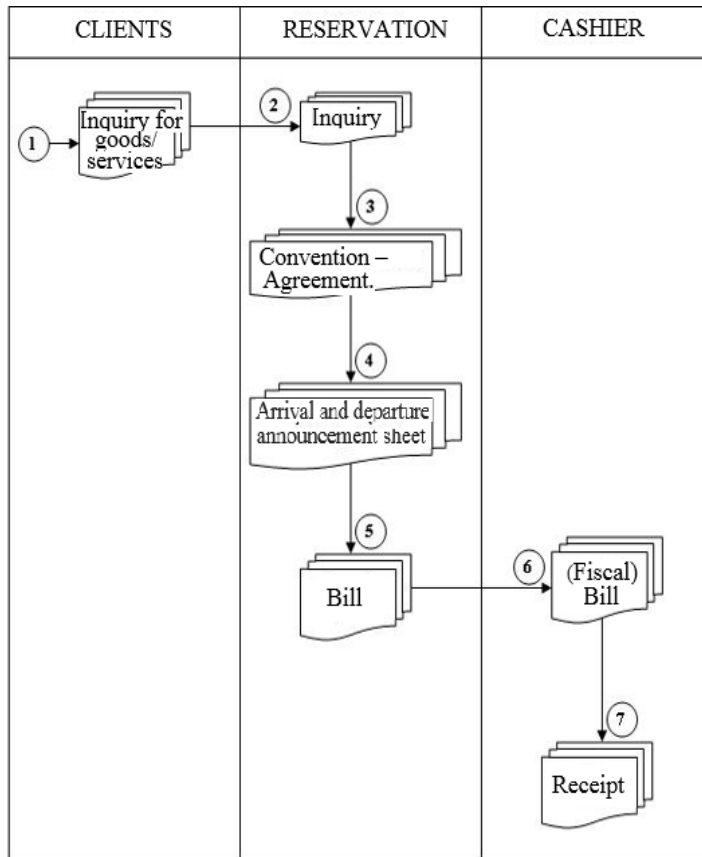
The starting point of the model is the customer's inquiry for goods or services, in which (s)he wants information on the number of rooms, the types of accommodation and the cost. This inquiry is analyzed by the front office manager, and in case it is possible, the customer fills in the written convention-contract. Once it is filled in, the receptionist registers the reservation by introducing the client's personal data, the type of room (s)he has requested and its number, the number of people and of days. Optionally, the client can require additional services, such as laundry, internet access, satellite TV and swimming-pool.

The moment the reservation is completed, the customer fills in the departure-arrival chart, after which he receptionist draws up his bill, invoice and receipt.

The offer will contain information on the type of hotel rooms and their rates, included services besides accommodation, potential discounts, the cost of meals served at the hotel restaurant, as well as means of payment accepted by the hotel management.

The procedure is the following :

Figure 1: Document Flow



- The client sends an inquiry for goods/services.
- The inquiry is analyzed by the front office manager, who presents an offer to the client.
- The client fills in the Convention – Agreement.
- The actual reservation is made and the chart announcing the arrival and departure is filled in.
- The cashier draws up the invoice.
- The receipt is printed.

The variables of an information application undoubtedly represent one of its most important aspects. Thus, reports must be drawn up so as not to leave room for errors, which could cause delays in the decision-making process at the management level, or even to lead to wrong decisions. As far as keeping track of the rooms, the reports are:

3. **Report on all hotel rooms** – this report will show all hotel rooms with the details corresponding to every room, namely: the room number, its code, the floor, the status of the respective room, the facilities etc.

Figure 2: Reports on all hotel rooms

| Report on all hotel rooms | | | | | | |
|---------------------------|-------------|--------------|------------|--------------|------------------------------|------------------------------------|
| | | | | | | Page 1 of 1 |
| NoRoom | id_TypeRoom | NameTypeRoom | TariffRoom | Floor | Status - Occupied/Unoccupied | Facilities - RoomEquipments |
| 1 | s | single | 150 | Ground floor | Free | TV, Refrigerator, Air conditioning |
| 2 | s | single | 150 | Ground floor | Free | TV, Refrigerator, Air conditioning |
| 3 | s | single | 150 | Ground floor | Occupied | TV, Refrigerator |
| 4 | s | single | 150 | Ground floor | Occupied | TV, Refrigerator |
| 5 | d | double | 300 | Ground floor | Free | TV, Refrigerator, Air conditioning |
| 6 | d | double | 300 | Ground floor | Free | TV, Refrigerator |
| 7 | t | triple | 400 | Ground floor | Occupied | TV, Refrigerator |
| 8 | a | apartment | 500 | Ground floor | Occupied | TV, Refrigerator, Air conditioning |
| 9 | a | apartment | 500 | Ground floor | Free | TV, Refrigerator, Air conditioning |
| 10 | a | apartment | 500 | 1st floor | Free | TV, Refrigerator, Air conditioning |
| 11 | s | single | 150 | 1st floor | Free | TV, Refrigerator |
| 12 | s | single | 150 | 1st floor | Free | TV, Refrigerator |
| 13 | s | single | 150 | 1st floor | Occupied | TV, Refrigerator |

3.1. Report on all available rooms in the hotel – it will show all the available rooms of the hotel on the date when it is drawn up (Figure 3)

Figure 3: Reports on all available rooms in the hotel

| Report on all available rooms in the hotel | | | | | | |
|--|-------------|--------------|------------|--------------|------------------------------|------------------------------------|
| | | | | | | Page 1 of 1 |
| NoRoom | id_TypeRoom | NameTypeRoom | TariffRoom | Floor | Status - Occupied/Unoccupied | Facilities - RoomEquipments |
| 1 | s | single | 150 | Ground floor | Free | TV, Refrigerator, Air conditioning |
| 2 | s | single | 150 | Ground floor | Free | TV, Refrigerator, Air conditioning |
| 5 | d | double | 300 | Ground floor | Free | TV, Refrigerator, Air conditioning |
| 6 | d | double | 300 | Ground floor | Free | TV, Refrigerator |
| 9 | a | apartment | 500 | Ground floor | Free | TV, Refrigerator, Air conditioning |
| 10 | a | apartment | 500 | 1st floor | Free | TV, Refrigerator, Air conditioning |
| 11 | s | single | 150 | 1st floor | Free | TV, Refrigerator |
| 12 | s | single | 150 | 1st floor | Free | TV, Refrigerator |

3.2. Report on all the occupied rooms in the hotel – it will display all the occupied rooms on the date when it is made (*Figure 4*).

Figure 4: Reports on all the occupied rooms in the hotel

| Report on a certain room | | | | | | |
|--------------------------|-------------|----------------|---------------|------------|----------|-------------|
| | | | | | | Page 1 of 1 |
| | | Selected Room: | | 1 | | |
| NoRoom | Id_TypeRoom | TariffRoom | NoReservation | Date | RoomType | Client Name |
| 1 | s | 300 | R118 | 28/04/2017 | Single | Chapman W. |
| | s | 300 | R133 | 16/05/2017 | Single | Johnson B. |

3.3. Report on a certain room – this report will show all reservations made for one particular room (*Figure 5*).

Figure 5: Reports on a certain room in the hotel

| Report on all the occupied rooms in the hotel | | | | | | |
|---|-------------|--------------|------------|--------------|------------------------------|------------------------------------|
| | | | | | | Page 1 of 1 |
| NoRoom | Id_TypeRoom | NameTypeRoom | TariffRoom | Floor | Status - Occupied/Unoccupied | Facilities - RoomEquipments |
| 3 | s | single | 150 | Ground floor | Occupied | TV, Refrigerator |
| 4 | s | single | 150 | Ground floor | Occupied | TV, Refrigerator |
| 7 | t | triple | 400 | Ground floor | Occupied | TV, Refrigerator |
| 8 | a | apartment | 500 | Ground floor | Occupied | TV, Refrigerator, Air conditioning |
| 5 | d | double | 300 | Ground floor | Free | TV, Refrigerator, Air conditioning |
| 6 | d | double | 300 | Ground floor | Free | TV, Refrigerator |
| 13 | s | single | 150 | 1st floor | Occupied | TV, Refrigerator |
| 14 | s | single | 150 | 1st floor | Occupied | TV, Refrigerator |

4. Reports on customer records

4.1. Report on all hotel clients – this report will show all hotel customers (Figure 6).

Figure 6: Reports on all hotel clients

| Report on all hotel clients | | | | | | | | | | |
|-----------------------------|--------------|-----------|---------------------|----------|-------------|------------------------|----------------|----------------|--------------|------|
| Page 1 of 1 | | | | | | | | | | |
| NoClient | ClientName | Locality | Street | NoStreet | Phone | PersonalIdentification | SeIdentityCard | NoIdentityCard | Count | Bank |
| CL133 | Arnette N. | Cluj | A.Iancu Boulevard | 187 | 0721xxxxxyy | 1840314889912 | RX | 074569 | BCR128946661 | BCR |
| CL134 | Perimark J. | Bucharest | Magheru Boulevard | 31 | 0788xxxxxyy | 1561223489654 | RR | 064789 | BRD678123412 | BRD |
| CL103 | Patterson J. | Bucharest | Magheru Boulevard | 123 | 0740xxxxxyy | 1800521774562 | RX | 063965 | BRD462114725 | BRD |
| CL101 | James A. | Bucharest | Magheru Boulevard | 7c | 0722xxxxxyy | 1840902460022 | RX | 074276 | BCR123456789 | BCR |
| CL102 | Doe F. | Brasov | Postavaru Boulevard | 215 | 0744xxxxxyy | 2840105841267 | RX | 074148 | BRD459315781 | BRD |
| CL115 | Matt T. | Iasi | Al.Cuza Boulevard | 4 | 0723xxxxxyy | 1790521783211 | RX | 062344 | BCR159348357 | BCR |
| CL116 | Reynolds H. | Bucharest | Magheru Boulevard | 12 | 0720xxxxxyy | 1520618742266 | RT | 076198 | BCR278669157 | BCR |
| CL117 | Trissport S. | Bucharest | Magheru Boulevard | 89-91 | 0726xxxxxyy | 1741214668815 | GT | 044215 | BRD782336448 | BRD |
| CL118 | Swank Sh. | Cluj | A.Iancu Boulevard | 25A | 0788xxxxxyy | 2790522872291 | RT | 071982 | BCR789321456 | BCR |
| CL119 | Weyers R. | Bucharest | Magheru Boulevard | 45 | 0721xxxxxyy | 2650819743288 | RR | 459781 | BRD453129744 | BRD |
| CL120 | Fox L. | Bucharest | Magheru Boulevard | 78 | 0724xxxxxyy | 2750218991158 | RT | 079321 | BRD593147893 | BRD |
| CL121 | Levitts O. | Bucharest | Magheru Boulevard | 145 | 0720xxxxxyy | 1590823459216 | RX | 052991 | BCR189632474 | BCR |

4.2. Report on a certain client – this report will display all all reservations made for one particular client (Figure 7)

Figure 7: Reports on a certain client

| Report on a certain client | | | | | | |
|-------------------------------|---------------|--------|------------|-------------|----------|------------|
| Page 1 of 1 | | | | | | |
| Selected Client: Patterson J. | | | | | | |
| Client Name | NoReservation | NoRoom | Date | Id_TypeRoom | RoomType | TariffRoom |
| Patterson J. | R104 | 3 | 21/03/2017 | s | Single | 100 |

5. Reports on keeping track of reservations

5.1. Report on all reservations – this report will show all reservations made until the date of the report (*Figure 8*).

Figure 8: Reports on all reservations

| Report on all reservations | | | | | | | | |
|----------------------------|---------------|--------|------------|---------------|------------|------------|-------------|--------------|
| | | | | | | | | Page 1 of 1 |
| Date | NoReservation | NoRoom | RoomType | NumberPersons | NumberDays | TariffRoom | Total Value | NoClient |
| 16/03/2017 | R101 | 30 | Apartament | 4 | 5 | 1200 | 1270 | James A. |
| 20/03/2017 | R103 | 2 | Single | 1 | 4 | 400 | 435 | Doe F. |
| 21/03/2017 | R104 | 3 | Single | 1 | 1 | 100 | 120 | Patterson J. |
| 21/03/2017 | R105 | 6 | Double | 2 | 3 | 540 | 560 | Matt T. |
| 21/03/2017 | R106 | 18 | Apartament | 2 | 6 | 1440 | 1500 | Reynolds H. |
| 28/03/2017 | R107 | 15 | Double | 2 | 2 | 360 | 405 | Trissport S. |

5.2. Report on all reservations made on a particular date – it will show all reservations made on a certain day (*Figure 9*).

Figure 9: Reports on all reservations made on a particular date

| Report on all reservations made on a particular date | | | | | | | | |
|--|---------------|--------|------------|---------------|------------|------------|-------------|---------------|
| | | | | | | | | Page 1 of 1 |
| | | | | | | | | Selected Date |
| | | | | | | | | 21/03/2017 |
| Date | NoReservation | NoRoom | RoomType | NumberPersons | NumberDays | TariffRoom | Total Value | NoClient |
| 21/03/2017 | R104 | 3 | Single | 1 | 1 | 100 | 120 | Patterson J. |
| 21/03/2017 | R105 | 6 | Double | 2 | 3 | 540 | 560 | Matt T. |
| 21/03/2017 | R106 | 18 | Apartament | 2 | 6 | 1440 | 1500 | Reynolds H. |

5.3. Report on all the reservations made by a particular client – this report will show all the reservations made by a particular client (*Figure 10*).

Figure 10: Reports on all reservations made by a particular client

Report on all reservations made by a particular client

Page 1 of 1

Selected Client Name James A.

| NoClient | NoReservation | Date | NoRoom | RoomType | NumberPersons | NumberDays | TariffRoom | Total Reservation |
|----------|---------------|------------|--------|------------|---------------|------------|------------|-------------------|
| James A. | R101 | 16/03/2017 | 30 | Apartament | 4 | 5 | 1200 | 1270 |

6. Reports on the orders

6.1. Report on all the orders – this report will display all the orders made at the hotel restaurant (*Figure 11*).

Figure 11: Reports on all the orders

Report on all the orders

Page 1 of 1

| NoOrder | NoReservation | ClientName | NoRoom | NumberPersonsFood | Id_FoodType | FoodType_Tariff |
|---------|---------------|------------|--------|-------------------|-------------|-----------------|
| CMD101 | R101 | James A. | 30 | 4 | Breakfast | 10 |
| CMD103 | R101 | James A. | 30 | 4 | Lunch | 30 |
| CMD104 | R101 | James A. | 30 | 4 | Dinner | 25 |
| CMD106 | R101 | James A. | 30 | 2 | Breakfast | 10 |
| CMD107 | R101 | James A. | 30 | 4 | Lunch | 30 |
| CMD108 | R101 | James A. | 30 | 4 | Breakfast | 10 |
| CMD110 | R122 | James A. | 30 | 2 | Breakfast | 10 |
| CMD111 | R122 | James A. | 30 | 2 | Lunch | 30 |
| CMD112 | R122 | James A. | 30 | 2 | Lunch | 30 |
| CMD113 | R122 | James A. | 30 | 2 | Lunch | 30 |
| CMD114 | R122 | Arnette N. | 30 | 2 | Lunch | 30 |
| CMD115 | R122 | Arnette N. | 30 | 2 | Lunch | 30 |

6.2. Report on all orders made on a particular date – this report will show all the orders made at the restaurant on a certain date (*Figure 12*).

Figure 12: Reports on all orders made on a particular date

| Report on all orders made on a particular date | | | | | | | |
|--|---------|---------------|--------|------------|---------------|-------------|-----------------|
| Date | | | | | | | Page 1 of 1 |
| Date | | | | | | | 04/05/2017 |
| Date | NoOrder | NoReservation | NoRoom | ClientName | NumberPersons | Id_FoodType | FoodType_Tariff |
| 04/05/2017 | | | | | | | |
| | CMD114 | R122 | 30 | Arnette N. | 2 | Lunch | 30 |
| | CMD115 | R122 | 30 | Arnette N. | 2 | Lunch | 30 |
| | CMD116 | R122 | 30 | Arnette N. | 2 | Breakfast | 10 |
| | CMD117 | R122 | 30 | Arnette N. | 2 | Lunch | 30 |
| | CMD118 | R122 | 30 | Arnette N. | 2 | Lunch | 30 |
| | CMD119 | R122 | 30 | Arnette N. | 2 | Lunch | 30 |

Therefore, with the help of the new information system, keeping track of reservations will be extremely easy to do. Also, reports and invoices will be generated through a simple click on a button, and changes will be made without using any other auxiliary instruments.

Conclusion

An additional strong point of the model is economizing on the operations execution time. Hence, the client will no longer wait in front of the reception desk for the forms to be filled in by hand, this being possible much more quickly the moment the new application is implemented. The same goes for reports, which will be generated in a very short interval, eliminating the manual search through the document archive.

The technologization of making reservations will improve the activity of keeping track of them by making it more efficient and thus suitable in meeting the requirements existing at the level of hotel management as rapidly as possible. These requirements will be fulfilled through the reports provided by the computerized application, based on the information it has gathered.

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ECONOMIC TERMINOLOGY – NEW TRENDS AND CHALLENGES

*Elena MUSEANU**

Abstract

The economic terminology represents a heterogeneous subsystem of the language from a functional point of view, which made it interesting to study it through the perspective of presenting the linguistic phenomena that manifest themselves more actively in the current phase of the language. The research of some Romanian texts from the current press of wider circulation shows a remarkable frequency of the economic terms. The media is an objective source for determining the current terms of interest in competition with those already assimilated, most of them of Roman origin. It is of interest in the ways of using these terms in Romanian language, from those who are not subject to any (formal) adaptation and, above all, what are the ways to make the specialized meaning accessible. The strict extra-linguistic determination entails a more rigorous use of the economic terms, with definitions and inter-conceptual relations manifested at the level of the terminological density, which are rather high in texts of wider circulation.

Keywords: *economic terminology, common language, specialized language, anglicism, dynamics*

JEL Classification: Z10

1. Introduction

The present research is part of the series of Romanian terminological studies undertaken in recent years, which wants to indicate the linguistic peculiarities of the terms in the economy.

Economic terminology can be appreciated today as a mixture that is difficult to separate between the language of economic science and the borrowed one, between the scientific language and the common one.

Economic terminology does not always effectively succeed in explaining new economic situations, which leads economists to resort to language borrowing from other fields or languages. The growth of English borrowing is constituted by a series of conditions specific to the current era, characterized by globalization. The multitude of information that reaches the general public through different media (through internet, television, telephony, etc.) and the increasingly active presence of the digital technology in everyday life have imposed the need for this research. Therefore, there were inventoried and exemplified words, meanings, stable phrases entered from foreign languages, especially from English, or created relatively recently in Romanian.

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We mention from the very beginning that the language is constantly changing, new words appear at every step, are very well known to some broader or narrower categories of speakers and used for a while. The present analysis tries to notice the dynamics of vocabulary in the current period when the lexicon of the Romanian language knows important accumulations of words that designate new realities.

2. Characteristics of the economic terminology in mass media

According to Cabré (1998: 182) terminology is “a set of needs, a set of practices to resolve these needs and a unified field of knowledge”. The second assumption is that terminology operates with terminological units which are multi-dimensional and which are simultaneously units of knowledge, units of language and units of communication. The description of these “terminological units” should cover the concept, the term and the situation components. This is what differentiates them from other units of language with the same structural features, i.e. words, and from the units that also express specialized knowledge, i.e. specialized, morphological and phraseological units.

Terminological competence, knowledge and the correct use of the terms is an essential condition for communication in general and for specialized language in particular. The specialist or the common speaker must use a precise, clear terminology, adapted to the communication situation.

The economic language can be researched in several forms: a specialized language, enshrined in textbooks, dictionaries and lexicons. Specialized language has a certain rigidity, being practically a closed language. The specialized economic language that appears in dictionaries, textbooks and specialized texts provides definitions of the economic terms, basic concepts and principles of the functioning of the economy. Economic terms very well known as *demand, supply, market, price, capital, money, cost, salary, profit, consumption, investment, inflation*, etc. they are often perimated to explain new contexts of a complex field of research, such as that of economics.

Communication between specialists in various fields is favored by neological borrowings from the specialized lexicon. These terms are very rarely used by ordinary speakers who do not belong to the respective professional sphere. In the common lexicon we meet only certain specialized terms, which due to excessive use become accessible to people as well.

The overlap between the common language and the specialized languages leads to the creation of an area in which the lexical terms or units migrate in one sense and in the other or, successively, in both directions. Many terms borrowed from the usual vocabulary have been redefined to be reintegrated into a specialized field characterized by the introduction of terminological neologisms.

The economic language is characterized by a clear and concise expression, which accurately defines the concepts, and is characterized by its own terminology, denotative and monosemantic.

The text of the economic language is characterized by clarity and precision according to the objectives of this field of professional activity. The popularization of the terms is achieved through the written and spoken press, which informs the public about the various aspects of the national and international, social, political and cultural-scientific life. The role of English terms is important as long as their use is justified by the need for communication. I agree with Mioara Avram's view, that is to say, the

acceptance or rejection of an English term must result from its usefulness in the language of the Romanian.

The current economic terminology is visibly moving away from the Roman source, going towards the Anglo-American one. The English influence in the common and specialized language and the problems of adaptation of English terms were analyzed by specialists. (see Stoichițoiu-Ichim 2001b) Many of the Romanian neologisms recorded in dictionaries have multiple etymology. The diverse origin is explained by the fact that several modern influences were exerted simultaneously on the Romanian language, among which French was one of great significance, and, subsequently, English, whose influence is currently fully exerted on our language.

In the present study, we have analyzed the updating of the economic terms in press texts of different types to describe some characteristics of the economic terminology, and we have found that some of them can be characterized by consistency, stability and precision created by the context, and others by semantic changes. Texts and contexts provide data on the evolution of economic terminology. The first category analyzed is represented by the English economic terms, with multiple appearances in the press, used in parallel with the equivalent Romanian terms: *developer/dezvoltator*, *dealer/distribuitoar*, *business/ afacere*, *cash/ numerar*, *brand/ marcă*, *provider/ furnizor*, *off-shore/paradisuri fiscale*, *discount/ reducere*, etc. We also present English economic terms frequently used in the language of origin: *board*, *boom*, *broker*, *buy-back*, *banking*, *cash flow*, *deadline*, *dumping*, *free-lancer*, *leasing*, *listing*, *manager*, *management*, *office*, *off-shore*, *planning*, *packaging*, *retail*, *start-up*, etc. Their international nature motivates their use in their original form. Here are some illustrative contexts:

“Salaries in the company can vary, from 7,800 lei for a testing engineer with five years of experience to 9,500 lei for a *software developer*.” (Salariile în companie pot varia, de la 7.800 de lei pentru un inginer în testare cu cinci ani de experiență la 9.500 de lei pentru un *software developer*.) (ziare.com, October 2021)

“Strategies for the urgent construction of new capacities for the production of electricity, heat, development of gas production capacities *on* and *off shore*” (Strategii de construire în regim de urgență a noi capacități de producție energie electrică, energie termică, de dezvoltare a capacităților de producție gaze *on* și *off shore*) (Bursa, October 2021)

In the present research we will make some quantitative observations, especially by reference to the economic terms of Roman source, already assimilated into the Romanian language. It is found that there are several degrees of formal adaptation and the explanation of the specialized meaning varies from strict paraphrasings to more vague quantitative determinations.

The Romanian language has been invaded by Anglicisms for many years, and the main source responsible for this influx is, especially, our written and audio-visual press. For this reason, the dictionaries of the Romanian language cannot keep up with the accelerated rhythm of enrichment with Anglicisms, useful or not, of the Romanian lexicon. Another category is represented by the specialized English terms that appear in the texts as direct loans and are used without explanation: *blue-chip*, *hedging*, *goodwill*, *joint venture*, *outsourcing*, *stock holder*, *equity*, *real estate*, etc. We also present some contexts from the studied press:

“The Sakhalin-2 project was a *joint-venture* between Gazprom in Russia, which owned 50%, Shell (27.5%), Mitsui (12.5%) and Mitsubishi (12.5%). It was developed in two stages, after an investment estimated at \$ 20 billion.” (Proiectul Sakhalin-2, era un *joint-venture* între Gazprom din Rusia, care deținea 50%, Shell (27,5%), Mitsui (12,5%) și Mitsubishi (12,5%). El a fost dezvoltat în două etape, după o investiție estimată la 20 de miliarde de dolari.) (ziare.com, August 2022)

“On the other hand, the revenues were 14% below the estimated ones by the Group, due to the non-creation of one of the anticipated *outsourcing* projects.” (Pe de altă parte, veniturile au fost cu 14% sub cele estimate de Grup, pe fondul neconcretizării unuia dintre proiectele de *outsourcing* anticipate.) (Bursa, September 2022)

“*Real-estate* analysis. The business model is changing in Central and Eastern Europe.” (Analiză *real-estate*. Se schimbă modelul de business în Europa Centrală și de Est.) (ZF, December 2022)

“The European *hedging* Fund is one of the largest in the world, but it is not a well-known name. The new unit, called BH Digital, will research and manage digital assets and other cryptocurrencies.” (Fondul european de *hedging* este unul dintre cele mai mari din lume, dar nu este un nume foarte cunoscut. Noua unitate, denumită BH Digital, va cerceta și va gestiona activele digitale și alte cryptoactive.) (Capital, September 2021)

We can ascertain the international character of these terms, which is why it is preferred to use them in their original form, precisely to be an easy tool of communication between specialists and not only. Anglicisms pose problems of graphic and sound adaptation. The use of these terms in the process of communication responds to cultural, social and functional expression needs. We refer to the emergence of new extralinguistic realities, determined by the progress of humanity, and to the necessity of the existence in language of terms that designate these new realities that we face.

Anglicisms are loans from both British and American English, which, for various reasons, are “in the process of adapting” (Stoichițoiu-Ichim 2006: 29). Therefore, they cannot be classified either in the category of fully assimilated loans or in those unassimilated, called *xenisms* or *alienisms* (ibid.: 28). The analysis of the economic terms of English origin made by us is useful to decide the perspectives of the influence of the English language in the Romanian vocabulary and, especially, in the economic one, even if, probably, many of them will not remain in the language because they do not satisfy the conditions of assimilation imposed by our language. In the general or specialized dictionaries there are not all these terms that circulate frequently in the press, which proves that some of them have exceeded the boundaries of the strict specialization, entering the common language. (Stoichițoiu-Ichim 2007: 67).

The influx of xenisms, “the advancement in the direction of lexical drift or semantic slips are tendencies confirmed by the press of the last years, with open p

The updating of the business terminology in the daily language promoted by the mass media has captured phenomena in full dynamics in the contemporary phase of the language, materialized especially in the activation of the use of terms from a specialized language in the vocabulary of the common language and vice versa. We also present some contexts from the media:

“What are the most sought-after and paid jobs? HoReCa – with a share of over 30% of employment among the inexperienced and an average salary of 480 euros. *Customer Service* – with a 26% share of employment among the inexperienced and an average salary of 650 euros. *Retail* – with a 18% share of employment among the inexperienced and an average salary of 570 euros (Care sunt cele mai căutate și plătite locuri de muncă? HoReCa – cu o pondere de peste 30% a angajărilor din rândul celor fără experiență și un salariu mediu de 480 de euro; *Customer Service* – cu o pondere de 26% a angajărilor din rândul celor fără experiență și un salariu mediu de 650 euro; *Retail* – cu o pondere de 18% a angajărilor din rândul celor fără experiență și un salariu mediu de 570 euro) (Cancan, September 2022)

Another category is the syntagmatic expression of the specialized economic meaning. In the researched material there are totally English phrases (*private banking, corporate finance, customer service, customer support, sold-out, shopper marketing, head office, product management, after sales*, etc.) and mixed phrases that correspond to some very current concepts and realities in the Romanian society (*retail market, futures market, futures quotation, futures contracts, outsourcing services, start-up costs, offset obligations, B2B sales*, etc.) Here are some contexts from the researched press:

“The technical skills that The Romanian employees plan to learn in the near future are, first of all, the development of the skills specific to the profession they practice (36% of the respondents), fluency in a foreign language (32.3%), qualification courses (22%), programming (19.5%), *project management* (16.4%), *digital marketing* (15.2%), artificial intelligence (9.1%) and *product management* (8.5%). On the following places are the competencies of *Computer Networking, Cloud Computing, Big Data Analysis, Business Intelligence, Digital Business Analysis* and Information Security. („Competențele tehnice pe care angajații români plănuiesc să le învețe în viitorul apropiat sunt, în primul rând, dezvoltarea abilităților specifice meseriei pe care o practică (36% dintre respondenți), fluența într-o limbă străină (32,3%), cursuri de calificare (22%), programare (19,5%), *project management* (16,4%), *digital marketing* (15,2%), inteligență artificială (9,1%) și *product management* (8,5%). Pe următoarele locuri se află competențe de *Computer Networking, Cloud Computing, analiză Big Data, Business Intelligence, Digital Business Analysis* și Securitatea Informației.”) (Capital, May 2021)

The syntagmatic analysis of the present research based on the study of contexts, conditioned by their integration in certain types of texts reflects the connection between the linguistic and conceptual system (Contente 2006: 457). We note in current economic terminology the preference for syntagmatic terms over simple ones.

The use of English terms in the written and audio-visual press develops numerous problems of use and adaptation due to phonetic, orthographic and morphological differences between Romanian and English. The English graphic form and the English phonetic aspect are preserved: *factoring, dumping, overbought, dealer*, etc. The adaptation of the Anglicisms to the Romanian language system is difficult, and their research can be useful to observe the perspectives of the English influence, even if “surely many of these words will not remain in the language because they do not satisfy the conditions of assimilation to the Romanian language” (A. Stoichițoiu-Ichim 2006: 19).

The manifestation of the phenomenon of anglicization in our country is also due to the current socio-political conditions as well as to the expansion of the economic and financial relations with the Western world, the English words being used by specialists for communication and information in all fields of activity (where the original terms

are preferred), as well as by the speakers, who use English as an international language of communication.

This avalanche of lexical units is based on the development of science, technology and communications, fields where the circulation of specific terminology is facilitated by the relatively high degree of knowledge of English. The realities called by Anglicisms require a monosemantic, unequivocal designation, to which is added the international character.

Extralinguistic progress in current societies in various fields of activity is observed in the need to use many terms in ordinary communication. This situation differs from one field to another, from one terminology to another, and from the ability of ordinary speakers to decode these terms. Therefore, we admit the dynamics of economic terminology, taking into account the different levels of use and the extralinguistic aspects.

3. Conclusion

Globalization favors the implantation of the neologisms, with advantages in communication, which contribute to a lexical enrichment. The present research presented the dynamics of vocabulary in the current period when the lexicon of the Romanian language knows important accumulations of words that designate new realities (technical, financial, economic, social, cultural, etc.). We can say that the tendency of internationalization of the Romanian lexicon will allow the maintenance in the active segment of the language of some of these elements, especially due to the fact that their value is denotative, being strictly associated with the extra-linguistic reality they represent, a reality that is a novelty towards the local field. Loans are today the most important means of enriching the Romanian lexicon.

The Romanian language has been invaded by Anglicisms for many years, and the main source responsible for this influx is, especially, our written and audio-visual press. For this reason, the dictionaries of the Romanian language cannot keep up with the accelerated rhythm of enrichment with Anglicisms, useful or not, of the Romanian lexicon. Therefore, our option turns to the weighted use of neologisms, generated only by situations in which their appearance is imposed by monosemantism and accuracy, not by their lexical preciousness or by the desire to synchronize with the current linguistic “fashion”. The extra-linguistic justification is precise taking into account the new technical, financial, economic, social, cultural realities, etc. Most of these realities have an international character, which contributes to their circulation in several languages, favoring adequate and fast communication.

The economic domain presents the greatest openness to the public through the continuous economic changes in the current society, which facilitate the introduction of new terms and the change of meaning or the attribution of new meanings of more common terms. Therefore, many terms contribute to a better understanding of all the economic phenomena that influence our daily reality, and economic terminology can be characterized by an openness to all types of texts and all types of speakers. Neologisms are inevitable and sometimes necessary or at least useful to the extralinguistic realities. The dynamic character of the Romanian language is supported by the flexibility that the language proves, manifested both at the level of the internal means of enrichment and at the external ones. Consequently, the research of the

Romanian economic terminology offers multiple possibilities of analyzing the texts and contexts, which are in a continuous dynamic.

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THE USE OF STATISTICAL DATA TO MEASURE THE CULTURAL PERFORMANCES OF THE COUNTIES IN ROMANIA

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Abstract

A positive correlation has been identified in the specialized literature between the number and nature of heritage elements in certain areas and their image and attractiveness as tourist destinations. Areas benefiting from heritage-based regeneration have a strong vitality and are perceived positively by those who use them. At the same time, the public (spectators, auditors) must be tracked from a statistical point of view, in all forms of reception of the culture in which they participate. Therefore, in order to carry out a complex analysis of the main cultural destinations in Romania, we used and processed the data from the National Institute of Statistics, which we considered relevant in order to observe the evolution and size of the previously mentioned destinations. In this way, we were able to make an overall analysis and a picture of the internal evolution of these areas.

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In order to be able to make an assessment of the cultural performances of the counties in our country, we identified, centralized and analyzed the number of museums at national level, the number of visits made within them, the number of spectators and auditors at artistic performances, historical monuments and UNESCO objectives present in each county, correlating them with the number of arrivals in tourist reception structures, over a period of 5 years, according to the most recent data available in the database of the National Institute of Statistics (INS) and excluding the period of the pandemic (which cannot be relevant).

We will begin the analysis mentioned above by researching the information available at the National Institute of Statistics regarding the number of museums and public collections in the period 2013 – 2017 (this being the most recent data published

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up to this point). Thus, it can be seen from the table below that in the most recent year analyzed (2017) a total of 762 museums and public collections were operating in Romania, a total that included the number of administrative units, including branches and sections. Throughout the analyzed period, their number increased, from 750 in 2013 to 762 in 2017.

The number of museums and public collections, by county, in the period 2013-2017¹

| Nr. crt. | Județul | Anul 2013 | Anul 2014 | Anul 2015 | Anul 2016 | Anul 2017 |
|----------|------------------------|-----------|-----------|-----------|-----------|-----------|
| 1. | Alba | 56 | 57 | 55 | 56 | 57 |
| 2. | Arad | 11 | 12 | 12 | 12 | 12 |
| 3. | Argeș | 27 | 27 | 27 | 29 | 29 |
| 4. | Bacău | 25 | 25 | 25 | 25 | 26 |
| 5. | Bihor | 12 | 11 | 13 | 12 | 14 |
| 6. | Bistrița-Năsăud | 10 | 10 | 10 | 10 | 10 |
| 7. | Botoșani | 10 | 10 | 10 | 10 | 9 |
| 8. | Brașov | 31 | 30 | 29 | 33 | 35 |
| 9. | Brăila | 8 | 8 | 8 | 8 | 9 |
| 10. | Buzău | 10 | 10 | 7 | 7 | 7 |
| 11. | Caraș-Severin | 10 | 10 | 10 | 14 | 15 |
| 12. | Călărași | 5 | 5 | 5 | 5 | 5 |
| 13. | Cluj | 22 | 22 | 22 | 21 | 21 |
| 14. | Constanța | 22 | 19 | 17 | 17 | 18 |
| 15. | Covasna | 9 | 9 | 9 | 9 | 9 |
| 16. | Dâmbovița | 28 | 28 | 32 | 33 | 31 |
| 17. | Dolj | 9 | 9 | 9 | 9 | 9 |
| 18. | Galați | 11 | 10 | 11 | 12 | 12 |
| 19. | Giurgiu | 5 | 4 | 4 | 4 | 4 |
| 20. | Gorj | 32 | 32 | 31 | 32 | 32 |
| 21. | Harghita | 25 | 23 | 24 | 25 | 23 |

¹ According to the INS, the museum is the cultural institution, of public or private law, not for profit, at the service of society, which collects, preserves, researches, restores, communicates and exhibits, for the purpose of knowledge, education or recreation, material testimonies and spiritual aspects of the existence and evolution of human communities, as well as of the environment. The collection is a set of cultural and natural goods, constituted in a systematic and coherent manner by natural or legal persons under public or private law. Public collections are collections accessible to the public and specialists, regardless of the owner of the property right, which bring together significant assets through their artistic, documentary, historical, scientific, cultural and memorialistic value. Private collections are the collections in the private ownership of individuals or legal entities under private law, to which the public and specialists have access only with the consent of the owners. According to the cultural goods that make up the museum heritage, museums and public collections are classified into: museums or public collections of art, archeology and history, science and natural history, science and technology, ethnography and anthropology, specialized, regional, general, mixed. Botanical and zoological gardens, aquariums and nature reserves are also included. Museum heritage, museums and public collections, public and private property, existing at the end of the reference year are recorded.

| Nr. crt. | Județul | Anul 2013 | Anul 2014 | Anul 2015 | Anul 2016 | Anul 2017 |
|--------------|----------------------|------------|------------|------------|------------|------------|
| 22. | Hunedoara | 16 | 16 | 16 | 17 | 18 |
| 23. | Ialomița | 6 | 6 | 6 | 6 | 6 |
| 24. | Iași | 20 | 22 | 24 | 25 | 24 |
| 25. | Ilfov | 6 | 7 | 7 | 7 | 7 |
| 26. | Maramureș | 19 | 19 | 20 | 20 | 20 |
| 27. | Mehedinți | 2 | 2 | 2 | 3 | 3 |
| 28. | Mureș | 14 | 13 | 13 | 13 | 14 |
| 29. | Neamț | 29 | 29 | 30 | 29 | 29 |
| 30. | Olt | 15 | 15 | 15 | 15 | 13 |
| 31. | Prahova | 31 | 33 | 34 | 38 | 37 |
| 32. | Satu Mare | 16 | 16 | 16 | 16 | 16 |
| 33. | Sălaj | 7 | 7 | 8 | 8 | 8 |
| 34. | Sibiu | 26 | 25 | 23 | 25 | 25 |
| 35. | Suceava | 30 | 30 | 28 | 29 | 29 |
| 36. | Teleorman | 7 | 6 | 6 | 7 | 7 |
| 37. | Timiș | 29 | 28 | 28 | 25 | 22 |
| 38. | Tulcea | 8 | 8 | 7 | 8 | 8 |
| 39. | Vaslui | 10 | 10 | 10 | 10 | 10 |
| 40. | Vâlcea | 20 | 19 | 19 | 19 | 19 |
| 41. | Vrancea | 20 | 20 | 20 | 20 | 20 |
| 42. | Municipiul București | 41 | 37 | 36 | 38 | 40 |
| TOTAL | | 750 | 739 | 738 | 761 | 762 |

Source: National Institute of Statistics - TEMPO database

In 2017, the counties with the most museums and public collections were Alba (57), Bucharest (40), Prahova (37), Brașov (35), Gorj (32) and Dâmbovița (31). At the opposite pole, the fewest museums and public collections were identified in the counties of Buzău, Ilfov, Teleorman (each with 7 units), Ialomița (6), Călărași (5), Giurgiu (4) and Mehedinți (3).

Regarding the evolution of the number of museums and public collections, certain increases can be noted for the counties of Prahova, Brașov, Caraș-Severin, Iași, Dâmbovița, Argeș, Bacău, Bihor, Hunedoara. Decreases in the number of museums and public collections were registered by the counties of Timiș, Constanța, Buzău, Cluj, Harghita, Olt, while the counties of Bistrița Năsăud, Călărași, Covasna, Galați, Ialomița, Satu Mare, Vaslui and Vrancea recorded constant values of the units analyzed.

Regarding the activity of museums and public collections, the first gratifying fact that can be observed from the information presented in the table below is that the number of visitors to museums and public collections increased nationally, by 39.4% during 2015 - 2019.

The number of visitors to museums and public collections, by county, in the period 2015-2019

| Nr. crt. | Județul | Anul 2015 | Anul 2016 | Anul 2017 | Anul 2018 | Anul 2019 |
|----------|-----------------|-----------|-----------|-----------|-----------|-----------|
| 1. | Alba | 268.881 | 291.532 | 280.064 | 288.014 | 217.549 |
| 2. | Arad | 65.198 | 63.260 | 64.239 | 71.444 | 89.184 |
| 3. | Argeș | 310.071 | 328.483 | 374.904 | 378.920 | 355.713 |
| 4. | Bacău | 74.301 | 90.012 | 118.556 | 119.320 | 113.526 |
| 5. | Bihor | 225.205 | 201.496 | 199.360 | 584.278 | 603.304 |
| 6. | Bistrița-Năsăud | 30.963 | 29.156 | 44.185 | 57.572 | 72.938 |
| 7. | Botoșani | 31.261 | 32.211 | 49.971 | 52.452 | 42.439 |
| 8. | Brașov | 1.836.448 | 2.035.632 | 2.382.643 | 2.530.341 | 2.629.860 |
| 9. | Brăila | 28.405 | 28.700 | 50.723 | 33.317 | 31.998 |
| 10. | Buzău | 44.540 | 49.669 | 63.115 | 161.992 | 116.773 |
| 11. | Caraș-Severin | 72.948 | 103.585 | 122.553 | 235.344 | 229.892 |
| 12. | Călărași | 48.937 | 56.290 | 63.188 | 65.406 | 62.087 |
| 13. | Cluj | 646.880 | 364.393 | 397.398 | 440.837 | 479.752 |
| 14. | Constanța | 505.235 | 678.618 | 761.990 | 891.786 | 900.985 |
| 15. | Covasna | 51.708 | 54.646 | 60.457 | 63.616 | 66.019 |
| 16. | Dâmbovița | 354.329 | 446.447 | 476.839 | 504.586 | 525.903 |
| 17. | Dolj | 176.169 | 186.316 | 175.588 | 186.031 | 186.158 |
| 18. | Galați | 362.376 | 238.350 | 291.676 | 432.994 | 395.442 |
| 19. | Giurgiu | 3.911 | 4.122 | 3.394 | 12.091 | 9.026 |
| 20. | Gorj | 247.298 | 266.580 | 276.855 | 264.068 | 292.561 |
| 21. | Harghita | 66.354 | 129.745 | 95.553 | 97.077 | 84.235 |
| 22. | Hunedoara | 515.944 | 613.127 | 756.619 | 582.031 | 644.454 |
| 23. | Ialomița | 31.317 | 40.321 | 23.856 | 108.744 | 113.491 |
| 24. | Iași | 343.271 | 554.201 | 681.525 | 767.196 | 794.331 |
| 25. | Ifov | 55.819 | 51.268 | 54.003 | 84.723 | 85.763 |
| 26. | Maramureș | 263.777 | 295.264 | 339.323 | 361.485 | 422.894 |
| 27. | Mehedinți | 18.703 | 24.620 | 29.591 | 91.071 | 130.170 |
| 28. | Mureș | 459.252 | 499.054 | 559.623 | 586.387 | 624.612 |
| 29. | Neamț | 501.334 | 567.552 | 635.247 | 654.015 | 662.014 |
| 30. | Olt | 15.958 | 20.587 | 18.743 | 20.491 | 33.480 |
| 31. | Prahova | 935.062 | 1.001.598 | 989.145 | 1.004.395 | 984.781 |
| 32. | Satu Mare | 81.435 | 71.911 | 73.165 | 70.016 | 77.100 |
| 33. | Sălaj | 85.342 | 105.175 | 106.684 | 110.618 | 113.799 |
| 34. | Sibiu | 1.140.500 | 12.86.245 | 1.333.547 | 1.361.142 | 1.673.206 |
| 35. | Suceava | 510.067 | 666.641 | 772.993 | 806.849 | 826.786 |
| 36. | Teleorman | 7.178 | 7.553 | 6.824 | 7.169 | 5.852 |
| 37. | Timiș | 197.081 | 165.449 | 175.222 | 201.927 | 255.433 |
| 38. | Tulcea | 154.287 | 217.350 | 265.149 | 260.601 | 216.103 |
| 39. | Vaslui | 145.147 | 177.439 | 175.495 | 171.334 | 173.389 |

| Nr. crt. | Județul | Anul 2015 | Anul 2016 | Anul 2017 | Anul 2018 | Anul 2019 |
|--------------|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 40. | Vâlcea | 391.453 | 391.454 | 414.565 | 453.142 | 469.911 |
| 41. | Vrancea | 37.044 | 68.050 | 82.812 | 116.742 | 96.422 |
| 42. | Municipiul București | 1.710.497 | 1.692.842 | 2.093.284 | 2.318.465 | 2.288.251 |
| TOTAL | | 13.051.886 | 14.196.944 | 15.940.666 | 17.610.029 | 18.197.586 |

Source: National Institute of Statistics - TEMPO database

Most counties recorded increases in the number of visitors between 2015 and 2019, the most significant being observed in Buzău, Caraș-Severin, Constanța, Dâmbovița, Giurgiu, Ialomița, Iași, Ilfov, Maramureș, Mehedinți, Sibiu, Suceava, Vrancea and the municipality of Bucharest. The only counties that recorded decreases in the number of visitors were Alba, Cluj, Satu Mare, Teleorman.

As a hierarchy, the most visitors were registered in 2019 at the museums and collections in Brașov county (2,629,860 people), followed by the municipality of Bucharest (2,288,251 people), Sibiu (1,673,206 people), Prahova (984,781 people) and Constanta (900,985 people). Counties such as Botoșani (42,439 people), Olt (33,480 people), Brăila (31,998 people), Giurgiu (9,026 people) and Teleorman (5,852 people) registered less than 500,000 visitors per year.

Regarding the activity of institutions and companies of shows or concerts, the National Institute of Statistics also has information on the number of spectators and auditors at artistic performances. Similarly to the evolution of the number of visitors to museums and public collections, it is noted in the table below that the number of spectators and auditors increased over the period 2015-2019, respectively by 39%.

The number of spectators and auditors at artistic performances, by county, in the period 2015-2019*

| Nr. crt. | Județul | Anul 2015 | Anul 2016 | Anul 2017 | Anul 2018 | Anul 2019 |
|----------|-----------------|-----------|-----------|-----------|-----------|-----------|
| 1. | Alba | 36.889 | 26.731 | 30.587 | 48.456 | 36.083 |
| 2. | Arad | 50.918 | 27.029 | 48.622 | 84.908 | 77.512 |
| 3. | Argeș | 184.225 | 143.649 | 132.394 | 155.104 | 146.271 |
| 4. | Bacău | 70.087 | 47.173 | 48.466 | 57.284 | 50.218 |
| 5. | Bihor | 179.400 | 100.931 | 117.265 | 140.057 | 135.792 |
| 6. | Bistrița-Năsăud | 111.950 | 114.125 | 109.680 | 69.354 | 69.200 |
| 7. | Botoșani | 108.643 | 131.979 | 137.101 | 136.604 | 151.970 |
| 8. | Brașov | 179.350 | 136.862 | 148.121 | 190.346 | 203.093 |
| 9. | Brăila | 23.528 | 27.454 | 41.863 | 55.377 | 56.512 |
| 10. | Buzău | 66.320 | 30.812 | 55.830 | 67.246 | 67.801 |
| 11. | Caraș-Severin | 30.476 | 21.369 | 27.325 | 34.798 | 46.606 |
| 12. | Cluj | 262.280 | 287.554 | 284.612 | 332.172 | 348.259 |
| 13. | Constanța | 110.809 | 90.735 | 121.412 | 123.005 | 91.013 |
| 14. | Covasna | 55.703 | 49.997 | 61.266 | 51.601 | 54.631 |
| 15. | Dâmbovița | 47.512 | 32.768 | 50.317 | 56.477 | 37.859 |

| Nr. crt. | Județul | Anul 2015 | Anul 2016 | Anul 2017 | Anul 2018 | Anul 2019 |
|--------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| 16. | Dolj | 330.472 | 349.652 | 607.833 | 648.421 | 579.339 |
| 17. | Galați | 121.499 | 110.862 | 139.859 | 107.527 | 113.473 |
| 18. | Giurgiu | 24.497 | 24.684 | 29.076 | 32.904 | 28.358 |
| 19. | Gorj | 138.474 | 168.899 | 138.501 | 158.673 | 165.697 |
| 20. | Harghita | 129.562 | 116.251 | 136.081 | 152.073 | 156.213 |
| 21. | Hunedoara | 21.861 | 39.051 | 67.150 | 87.340 | 82.398 |
| 22. | Ialomița | 50.000 | 30.000 | 32.000 | 29.243 | 16.000 |
| 23. | Iași | 146.564 | 166.090 | 171.596 | 259.481 | 290.939 |
| 24. | Ilfov | 37.820 | 52.800 | 47.700 | 26.400 | 21.120 |
| 25. | Maramureș | 219.061 | 143.502 | 138.598 | 146.765 | 138.426 |
| 26. | Mehedinți | 186.000 | 187.000 | 195.000 | 124.394 | 121.394 |
| 27. | Mureș | 246.949 | 246.034 | 248.773 | 210.405 | 203.991 |
| 28. | Neamț | 9.497 | 16.143 | 18.402 | 28.561 | 17.859 |
| 29. | Olt | 77.600 | 76.200 | 98.500 | 80.000 | 230.000 |
| 30. | Prahova | 34.606 | 50.785 | 53.158 | 50.191 | 67.379 |
| 31. | Satu Mare | 69.441 | 67.199 | 79.164 | 72.887 | 78.996 |
| 32. | Sălaj | 76.740 | 67.437 | 57.063 | 67.056 | 63.857 |
| 33. | Sibiu | 270.000 | 382.308 | 364.348 | 1.241.707 | 1.285.509 |
| 34. | Suceava | 90.756 | 121.523 | 246.581 | 267.533 | 364.060 |
| 35. | Teleorman | 20.000 | 16.000 | 20.000 | 80.000 | 35.000 |
| 36. | Timiș | 234.265 | 253.550 | 267.113 | 237.553 | 168.108 |
| 37. | Tulcea | 46.035 | 49.645 | 56.503 | 61.477 | 73.247 |
| 38. | Vaslui | 18.640 | 22.406 | 20.603 | 22.646 | 18.611 |
| 39. | Vâlcea | 81.041 | 81.260 | 84.760 | 83.026 | 93.602 |
| 40. | Vrancea | 273.631 | 225.966 | 304.877 | 317.005 | 287.650 |
| 41. | Municipiul București | 1.333.504 | 1.414.778 | 1.387.053 | 1.724.451 | 1.800.441 |
| TOTAL | | 5.806.605 | 5.749.193 | 6.425.153 | 7.920.508 | 8.074.487 |

Source: National Institute of Statistics - TEMPO database

* no data were available for Călărași county

The counties in which the most spectacular increases in the number of spectators and auditors at artistic performances were recorded between 2015 and 2019 were Sibiu (376% increase) and Suceava (301% increase). Also worth mentioning are the performances located on an upward trend in the counties of Brăila, Cluj, Dolj, Gorj, Hunedoara, Iași, Neamț, Olt, Prahova, Teleorman, Tulcea and the municipality of Bucharest. The counties that recorded decreases in the number of spectators and auditors at artistic performances between 2015 and 2019 were more numerous this time, compared to those that recorded decreases in visitors to museums and public collections, respectively: Alba, Argeș, Bacău, Bihor, Bistrita-Năsăud, Botoșani, Constanța, Covasna, Dâmbovița, Galați, Ialomița, Ilfov, Maramureș, Mehedinți, Mureș, Sălaj, Timiș.

In 2019, the most visitors were registered at the shows and artistic performances in the city of Bucharest (1,800,441 people), followed by the counties of Sibiu (1,285,509 people), Dolj (579,339 people), Suceava (364,060 people) and Cluj (348,259 people). Counties such as Giurgiu (28,358 people), Ilfov (21,120 people), Vaslui (18,611 people), Neamț (17,859 people) and Ialomița (16,000 people) recorded less than 30,000 spectators per year.

The analysis of the number of tourist arrivals (Romanian and foreign) registered at national level in the records of the National Institute of Statistics between 2015 and 2019 shows an increase of 34.8%.

**Arrivals of tourists (Romanians and foreigners) in tourist reception structures,
by county, in the period 2015-2019**

| Nr. crt. | Județul | Anul 2015 | Anul 2016 | Anul 2017 | Anul 2018 | Anul 2019 |
|----------|------------------------|-----------|-----------|-----------|-----------|-----------|
| 1. | Alba | 154.210 | 167.970 | 172.340 | 194.818 | 201.840 |
| 2. | Arad | 214.826 | 199.675 | 201.016 | 217.448 | 236.270 |
| 3. | Argeș | 195.200 | 209.359 | 230.517 | 247.703 | 267.349 |
| 4. | Bacău | 124.517 | 134.550 | 144.489 | 152.977 | 176.693 |
| 5. | Bihor | 344.059 | 411.823 | 478.258 | 549.171 | 540.675 |
| 6. | Bistrița-Năsăud | 80.293 | 94.275 | 113.378 | 117.982 | 118.112 |
| 7. | Botoșani | 37.670 | 43.972 | 52.343 | 47.009 | 51.975 |
| 8. | Brașov | 997.601 | 1.114.395 | 12.60.742 | 1.380.277 | 142.1901 |
| 9. | Brăila | 71.417 | 72.813 | 80.331 | 82.869 | 88.879 |
| 10. | Buzău | 68.295 | 71.817 | 91.252 | 95.731 | 102.709 |
| 11. | Caraș-Severin | 171.626 | 181.195 | 191.968 | 229.568 | 244.623 |
| 12. | Călărași | 17.809 | 19.095 | 22.090 | 22.357 | 27.472 |
| 13. | Cluj | 428.812 | 498.465 | 633.569 | 656.508 | 670.560 |
| 14. | Constanța | 1.021.475 | 1.162.958 | 1.235.542 | 1.312.418 | 1.380.607 |
| 15. | Covasna | 88.800 | 99.117 | 108.114 | 119.372 | 137.442 |
| 16. | Dâmbovița | 89.548 | 97.043 | 106.166 | 118.591 | 122.107 |
| 17. | Dolj | 102.486 | 97.139 | 124.861 | 118.222 | 114.844 |
| 18. | Galați | 74.416 | 84.564 | 98.219 | 93.355 | 106.540 |
| 19. | Giurgiu | 24.860 | 25.329 | 27.921 | 26.860 | 26.540 |
| 20. | Gorj | 78.418 | 84.273 | 111.308 | 112.950 | 112.308 |
| 21. | Harghita | 157.659 | 183.725 | 205.537 | 220.954 | 237.386 |
| 22. | Hunedoara | 151.060 | 143.870 | 168.346 | 189.526 | 194.245 |
| 23. | Ialomița | 44.863 | 41.959 | 42.996 | 42.154 | 43.567 |
| 24. | Iași | 246.470 | 298.657 | 321.359 | 333.021 | 341.916 |
| 25. | Ilfov | 126.858 | 138.093 | 158.907 | 198.936 | 197.792 |
| 26. | Maramureș | 154.633 | 188.988 | 217.028 | 255.812 | 276.064 |
| 27. | Mehedinți | 81.003 | 91.405 | 104.089 | 98.303 | 112.174 |
| 28. | Mureș | 495.481 | 517.111 | 544.479 | 571.454 | 599.036 |
| 29. | Neamț | 182.384 | 224.105 | 238.783 | 246.887 | 265.055 |
| 30. | Olt | 33.343 | 35.177 | 38.777 | 33.048 | 29.216 |

| Nr. crt. | Județul | Anul 2015 | Anul 2016 | Anul 2017 | Anul 2018 | Anul 2019 |
|--------------|-----------------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| 31. | Prahova | 467.158 | 509.491 | 534.079 | 567.877 | 585.785 |
| 32. | Satu Mare | 94.908 | 85.435 | 97.750 | 101.518 | 114.390 |
| 33. | Sălaj | 37.962 | 37.377 | 41.761 | 40.738 | 46.488 |
| 34. | Sibiu | 438.611 | 503.620 | 565.346 | 566.705 | 575.545 |
| 35. | Suceava | 310.548 | 342.710 | 385.676 | 430.673 | 465.921 |
| 36. | Teleorman | 13.214 | 11.865 | 10.704 | 10.609 | 11.471 |
| 37. | Timiș | 338.238 | 375.221 | 399.368 | 379.084 | 396.644 |
| 38. | Tulcea | 69.076 | 73.114 | 100.430 | 168.173 | 168.412 |
| 39. | Vaslui | 37.886 | 40.051 | 45.173 | 46.638 | 50.967 |
| 40. | Vâlcea | 286.892 | 322.452 | 357.423 | 376.963 | 423.279 |
| 41. | Vrancea | 43.290 | 41.350 | 36.941 | 49.643 | 51.286 |
| 42. | Municipiul București | 17.23.999 | 1.926.919 | 2.043.970 | 2.080.229 | 2.038.858 |
| TOTAL | | 9.921.874 | 11.002.522 | 12.143.346 | 12.905.131 | 13.374.943 |

Source: National Institute of Statistics - TEMPO database

From the analysis of the above information, it emerged that the situation of tourist arrivals by county (Romanians and foreigners) in 2019 is as follows: the most registered in the city of Bucharest (2,038,858), followed closely by Brașov (1,421,901) and Constanța (1,380,607) and at a slightly greater distance from the counties of Cluj (670,560), Mureș (599,036), Prahova (585,785) and Sibiu (575,545). At the opposite pole, the fewest tourists arrived in the counties of Olt (29,216), Călărași (27,472), Giurgiu (26,540) and Teleorman (11,471).

The table below shows the distribution of historical monuments by county. According to the data of the National Heritage Institute, most are located in the country's capital, Bucharest (2,651 monuments, which represents 8.8% of the total). The city of Bucharest is followed by the following in the hierarchy of counties with more than 1,000 objectives registered in the LMI: Cluj (1,791 monuments, 5.9% of the total), Iași (1,634 monuments, 5.4% of the total), Dâmbovița (1,237 monuments, 4.1% of the total), Prahova (1,073 monuments, 3.6% of the total), Sibiu (1,053 monuments, 3.5% of the total), Argeș (1,022 monuments, 3.4% of the total) and Mureș (1,018 monuments, 3.3% of the total). At the opposite pole, the fewest historical monuments (less than 1% of the total) can be found in the counties of Călărași (285 monuments), Galați (263 monuments), Ialomița (227 monuments) and Brăila (172 monuments)

The number of historical monuments, by county - year 2015

| Nr. crt. | Județul | Nr. monumente istorice |
|----------|-----------------------------|------------------------|
| 1. | Municipiul București | 2.651 |
| 2. | Cluj | 1.791 |
| 3. | Iași | 1.634 |
| 4. | Dâmbovița | 1.237 |
| 5. | Prahova | 1.073 |

| Nr. crt. | Județul | Nr. monumente istorice |
|--------------|-----------------|------------------------|
| 6. | Sibiu | 1.053 |
| 7. | Argeș | 1.022 |
| 8. | Mureș | 1.018 |
| 9. | Brașov | 986 |
| 10. | Buzău | 869 |
| 11. | Caras-Severin | 832 |
| 12. | Vâlcea | 791 |
| 13. | Bistrița-Năsăud | 768 |
| 14. | Olt | 758 |
| 15. | Harghita | 742 |
| 16. | Ilfov | 730 |
| 17. | Dolj | 700 |
| 18. | Constanța | 694 |
| 19. | Alba | 686 |
| 20. | Maramureș | 610 |
| 21. | Covasna | 594 |
| 22. | Tulcea | 574 |
| 23. | Mehedinți | 570 |
| 24. | Sălaj | 546 |
| 25. | Giurgiu | 540 |
| 26. | Neamț | 537 |
| 27. | Hunedoara | 518 |
| 28. | Suceava | 518 |
| 29. | Botoșani | 510 |
| 30. | Gorj | 503 |
| 31. | Bihor | 455 |
| 32. | Vaslui | 438 |
| 33. | Vrancea | 427 |
| 34. | Arad | 417 |
| 35. | Teleorman | 392 |
| 36. | Bacău | 366 |
| 37. | Timiș | 340 |
| 38. | Satu Mare | 310 |
| 39. | Călărași | 285 |
| 40. | Galați | 263 |
| 41. | Ialomița | 227 |
| 42. | Brăila | 172 |
| TOTAL | | 30.147 |

Source: List of Historical Monuments (2015), available at <https://patrimoni.ro/monumente-istorice/lista-monumentelor-istorice>

Romania has a total of 32 historical monuments that are part of the World Heritage List (UNESCO). Their situation by county is shown in the table below, from which it can be seen that most are located in Suceava and Maramureş counties (8 in each county), followed by Hunedoara (5 sites), Alba (3 sites), Sibiu, Braşov and Mureş each have 2 UNESCO sites, and the counties of Vâlcea and Harghita have one each.

The number of cultural sites inscribed on the UNESCO World Heritage List

| Nr. crt. | Judeţul | Nr. situri culturale UNESCO |
|--------------|-----------|-----------------------------|
| 1. | Suceava | 8 |
| 2. | Maramureş | 8 |
| 3. | Hunedoara | 5 |
| 4. | Alba | 3 |
| 5. | Sibiu | 2 |
| 6. | Braşov | 2 |
| 7. | Mureş | 2 |
| 8. | Vâlcea | 1 |
| 9. | Harghita | 1 |
| TOTAL | | 32 |
| TOTAL | | 30.147 |

Source: List of Historical Monuments (2015), available at <https://patrimoniul.ro/monumente-istorice/lista-monumentelor-istorice>

Conclusions:

- in 2019, the counties that recorded the most tourist arrivals and that had the largest number of visitors to museums and collections were in descending order: Bucharest, Braşov, Sibiu, Prahova, Suceava and Cluj. Of these, only Suceava, Braşov and Sibiu have the advantage of also having cultural objectives declared UNESCO monuments. Instead, most historical monuments can be found in Bucharest, Cluj, Prahova and Sibiu. The counties that recorded the most spectators and auditors at the artistic performances were Bucharest, Sibiu, Suceava and Cluj;
- the top 10 may also include the cultural performances of the counties of Constanţa, Mureş (in terms of tourist arrivals and museum visitors), Vâlcea (in terms of tourist arrivals and UNESCO monuments);
- Maramureş stands out for the number of UNESCO monuments, arrivals of tourists and visitors to museums;
- Hunedoara holds the 3rd place in terms of the number of UNESCO monuments and was in the top 10 counties with the most visitors to museums and public collections;
- Vâlcea was ranked last in the top 10 counties that attracted the most Romanian and foreign tourists and 12th in the top counties with the largest number of historical monuments (it also has a UNESCO monument);
- Alba county has the most museums and public collections and three UNESCO monuments, but it did not attract enough tourists and visitors to be included in the top 10;

- counties such as Timiș and Harghita did not enter the top 10 either, but there are Iași, Dâmbovița, Mureș, Argeș, Neamț;
- all this information can be found cumulatively in the centralizing table below.

CENTRALIZING TABLE – the cultural performances of the counties in 2019

| Nr. crt. | Județul | Nr. de muzee și colecții publice | Nr. de vizitatori în muzee și colecții publice | Nr. de spectatori și auditori la reprezentații artistice | Nr. de sosiri (turisți români și străini) | Monumente istorice | Monumente UNESCO |
|----------|----------------------|----------------------------------|--|--|---|--------------------|------------------|
| 1. | Alba | 57 | 217.549 | 36.083 | 201.840 | 686 | 3 |
| 2. | Municipiul București | 40 | 2.288.251 | 1.800.441 | 2.038.858 | 2.651 | - |
| 3. | Prahova | 37 | 98.4781 | 67.379 | 585.785 | 1.073 | - |
| 4. | Brașov | 35 | 2.629.860 | 203.093 | 1.421.901 | 986 | 2 |
| 5. | Gorj | 32 | 292.561 | 165.697 | 112.308 | 503 | - |
| 6. | Dâmbovița | 31 | 525.903 | 37.859 | 122.107 | 1.237 | - |
| 7. | Argeș | 29 | 355.713 | 146.271 | 267.349 | 1.022 | - |
| 8. | Neamț | 29 | 662.014 | 17.859 | 265.055 | 537 | - |
| 9. | Suceava | 29 | 826.786 | 364.060 | 465.921 | 518 | 8 |
| 10. | Bacău | 26 | 113.526 | 50.218 | 176.693 | 366 | - |
| 11. | Sibiu | 25 | 1.673.206 | 1.285.509 | 575.545 | 1.053 | 2 |
| 12. | Iași | 24 | 794.331 | 290.939 | 341.916 | 1.634 | - |
| 13. | Harghita | 23 | 84.235 | 156.213 | 237.386 | 742 | 1 |
| 14. | Timiș | 22 | 255.433 | 168.108 | 396.644 | 340 | - |
| 15. | Cluj | 21 | 479.752 | 348.259 | 670.560 | 1.791 | - |
| 16. | Maramureș | 20 | 422.894 | 138.426 | 276.064 | 610 | 8 |
| 17. | Vrancea | 20 | 96.422 | 287.650 | 51.286 | 427 | - |
| 18. | Vâlcea | 19 | 469.911 | 93.602 | 423.279 | 791 | 1 |
| 19. | Constanța | 18 | 900.985 | 91.013 | 1.380.607 | 694 | - |
| 20. | Hunedoara | 18 | 644.454 | 82.398 | 194.245 | 518 | 5 |
| 21. | Satu Mare | 16 | 77.100 | 78.996 | 114.390 | 310 | - |
| 22. | Caraș-Severin | 15 | 229.892 | 46.606 | 244.623 | 832 | - |
| 23. | Bihor | 14 | 603.304 | 135.792 | 540.675 | 455 | - |
| 24. | Mureș | 14 | 624.612 | 203.991 | 599.036 | 1.018 | 2 |
| 25. | Olt | 13 | 33.480 | 230.000 | 29.216 | 758 | - |
| 26. | Arad | 12 | 89.184 | 77.512 | 236.270 | 417 | - |
| 27. | Galați | 12 | 395.442 | 113.473 | 106.540 | 263 | - |
| 28. | Bistrița-Năsăud | 10 | 72.938 | 69.200 | 118.112 | 768 | - |
| 29. | Vaslui | 10 | 173.389 | 18.611 | 50.967 | 438 | - |
| 30. | Botoșani | 9 | 42.439 | 151.970 | 51.975 | 510 | - |
| 31. | Brăila | 9 | 31.998 | 56.512 | 88.879 | 172 | - |
| 32. | Covasna | 9 | 66.019 | 54.631 | 137.442 | 594 | - |
| 33. | Dolj | 9 | 186.158 | 579.339 | 114.844 | 700 | - |

| Nr. crt . | Județul | Nr. de muzee și colecții publice | Nr. de vizitatori în muzee și colecții publice | Nr. de spectatori și auditori la reprezentații artistice | Nr. de sosiri (turiști români și străini) | Monumente istorice | Monumente UNESCO |
|--------------|-----------|----------------------------------|--|--|---|--------------------|------------------|
| 34. | Sălaj | 8 | 113.799 | 63.857 | 46.488 | 546 | - |
| 35. | Tulcea | 8 | 216.103 | 73.247 | 168.412 | 574 | - |
| 36. | Buzău | 7 | 116.773 | 67.801 | 102.709 | 869 | - |
| 37. | Ilfov | 7 | 85.763 | 21.120 | 197.792 | 730 | - |
| 38. | Teleorman | 7 | 5.852 | 35.000 | 11.471 | 392 | - |
| 39. | Ialomița | 6 | 113.491 | 16.000 | 43.567 | 227 | - |
| 40. | Călărași | 5 | 62.087 | - | 27.472 | 285 | - |
| 41. | Giurgiu | 4 | 9.026 | 28.358 | 26.540 | 540 | - |
| 42. | Mehedinți | 3 | 130.170 | 121.394 | 112.174 | 570 | - |
| TOTAL | | 762 | 18.197.586 | 8.074.487 | 13.374.943 | 30.147 | 32 |

Sources: National Institute of Statistics - TEMPO database, List of Historical Monuments, UNESCO World Heritage List

THE PHENOMENON OF OVER-TOURISM IN A POST-PANDEMIC CONTEXT. CASE OF BARCELONA

*Ioana Cristiana PATRICHI*¹

Abstract

As destinations have grown in visibility over time, the tourism industry has responded by facilitating tourist access to these places and developing specific infrastructure. This visibility was supported by the development of the Internet and the emergence of social networks, such as Facebook, Instagram or Tik-Tok, which, through hashtags, brought to the fore lesser-known attractions and tourist destinations. In this context, many tourist destinations, both urban and natural, face the suffocating presence of tourists.

The Covid 19 pandemic has brought an unprecedented situation, from overcrowded destinations and destinations at risk of over-tourism to “ghost towns” and empty destinations. This paper aims to examine the issues faced by the destinations known for their struggles with over-tourism, before and during the Covid-19 pandemic, with a focus on Barcelona.

Keywords: *over-tourism, pandemic, covid-19, sustainable tourism*

JEL Classification: L83, Q01, Q50

Introduction

The COVID-19 pandemic has had a significant effect on over-tourism in various destinations around the world. Due to travel restrictions and quarantine measures, the number of tourists visiting destinations has dropped dramatically, leading to a decrease in the strain on resources and infrastructure that is often associated with over-tourism.

One of the most immediate effects of the pandemic on over-tourism has been the reduction in overcrowding in popular tourist areas. For example, in destinations like Barcelona, Venice, Rome, and Amsterdam, which have long struggled with over-tourism, the decrease in tourist numbers has led to a noticeable reduction in crowds and a corresponding improvement in the quality of life for local residents.

The pandemic has also led to a renewed focus on sustainable and responsible travel. With tourism numbers down, destinations have had an opportunity to implement sustainable tourism management strategies and invest in infrastructure that prioritizes the needs of local communities and the environment. However, it is important to note that the decrease in tourism due to the pandemic has also had a severe economic impact on destinations that rely heavily on tourism. Many businesses in the tourism sector have been forced to close or lay off employees, and destinations have lost significant revenue as a result.

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The phenomenon of over-tourism and its causes

Tourism is a vital sector of the global economy, generating significant revenue and providing employment opportunities for millions of people worldwide. However, as the industry continues to grow, it is increasingly facing the issue of over-tourism, defined as the negative impacts of excessive numbers of tourists in a specific destination.

In 2012, the #overtourism hashtag drew attention for the first time to the overcrowding of tourists faced by certain places around the globe (either cities or man-made natural tourist attractions).

In 2016, Skift is said to have created (and later trademarked) the word 'over-tourism'. Several definitions of 'over-tourism' have emerged since. According to the universities collaborating on this project, 'over-tourism' can be defined as "the impact of tourism on a destination, or parts thereof, that excessively influences perceived quality of life of citizens and/or quality of visitors experiences in a negative way". World Tourism Organization (2018) define over-tourism as "the phenomenon of a location being visited by so many visitors that the quality of life of the residents and/or the quality of the visitor experience is negatively impacted."

Also, according to Sustainable Tourism International "over-tourism occurs when tourism exceeds the carrying capacity of a destination, resulting in negative impacts on the environment, local communities, and the overall visitor experience", while The Responsible Tourism Partnership refers to 'over-tourism' as "destinations where hosts or guests, locals or visitors, feel that there are too many visitors and that the quality of life in the area or the quality of the experience has deteriorated unacceptably. It is the opposite of *Responsible Tourism* which is about using tourism to make better places to live in and better places to visit. Often both visitors and guests experience the deterioration concurrently".

What made the news in 2017 was the sudden backlash from residents, which had not happened before on any large scale. There had been a slow drip feed of tourism into cities such as Barcelona, Venice and Dubrovnik, into places one thought of as remote such as Iceland and Skye, and finally, as the balance tipped and this new concept was given a name, the protests spread.

One of the main factors contributing to the development of tourism into over-tourism is the increasing affordability and accessibility of travel. With the rise of budget airlines and online travel booking platforms, travel has become more affordable for a wider range of people, leading to an increase in the number of tourists visiting destinations around the world. Another way in which low-cost airlines have contributed to over-tourism is by making it possible for people to travel more frequently and for shorter periods of time. These airlines often offer flights at lower prices than traditional airlines, making it possible for people to take more frequent trips, but also have increased potential for almost major city to be the site for weekend visits, weddings or other related social events (Dodds, 2019). This can lead to an over-concentration of tourists in certain destinations, resulting in overcrowding and strain on resources.

Another factor is the rise of social media and the internet, which has made it easier for people to discover and share information about destinations. This has led to a surge in interest in certain destinations, particularly those that are considered to be "Instagrammable" or "Insta-famous", resulting in an over-concentration of tourists in these locations.

The rise in mass tourism has led to a strain on resources and infrastructure in popular destinations. This can result in overcrowding, long queues, and increased pollution. It also leads to a decline in the quality of life for residents, who may be impacted by noise pollution and rising property prices, as well as damage to the city's cultural and natural heritage. The development of tourism into over-tourism also has a negative impact on the environment. The increased demand for tourism can lead to the destruction of natural habitats and wildlife, as well as increased pollution and carbon emissions.

To address the issue of over-tourism, destinations must come up with sustainable tourism management strategies that prioritize the needs of local communities and the environment. This could include measures such as implementing tourist quotas, promoting alternative modes of transportation, and investing in sustainable infrastructure, but also a mix of taxes, legislation and regulation (Milano, 2019). Also, smart technologies can be used in order to monitor the level of traffic in the cities and prevent overcrowding in places attractive to tourists (Šenková, 2022).

Tourism boards and travel companies must also focus on promoting responsible travel and educating tourists on the impacts of over-tourism. This could include offering more sustainable travel options and providing information on how to minimize negative impacts while traveling.

Overall, the development of tourism into over-tourism is a complex issue that requires a multi-faceted approach. By implementing sustainable tourism management strategies, promoting responsible travel, and educating tourists, destinations can ensure that tourism can continue to be a source of economic and social benefits while minimizing negative impacts.

COVID-19 pandemic and tourism

The COVID-19 pandemic has had a significant impact on the tourism industry, leading to travel restrictions and a decrease in the number of tourists visiting destinations around the world. The pandemic caused an unprecedented disruption to tourism, with a massive fall of international demand amid widespread lockdowns and travel restrictions put in place by countries in order to contain the spread of the virus (UNWTO). This resulted in huge economic and social impacts, placing over 100 million direct tourism jobs at risk, especially in micro, small and medium sized enterprises (MSMEs) which represent 80% of the sector and employ a high share of women and young people.

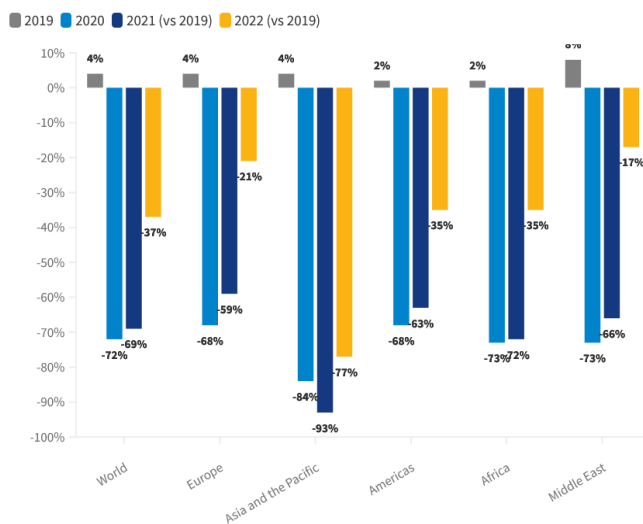
Figure 1. Tourism industry between 2019-2021

| Indicators | 2019 | 2020 | 2021 |
|--|------------------|------------------|------------------|
| International tourist arrivals (overnight visitors) | 1.5 billion | 406 million | 429 million |
| Export revenues from international tourism (international tourism receipts + passenger transport) | USD 1.7 trillion | USD 651 billion | USD 728 billion |
| Tourism Direct Gross Domestic Product (TDGDP) | USD 3.5 trillion | USD 1.7 trillion | USD 2.2 trillion |

Source: Source: UNWTO – World Tourism Barometer

International travel plunged by 72% in 2020, the worst year on record for tourism, resulting in 1.1 billion fewer international tourists worldwide (overnight visitors), putting the number of travelers back to levels of 30 years ago. International tourism experienced a 5% increase in 2021, 22 million more international tourist arrivals (overnight visitors) compared to 2020 (427 million versus 405 million). However, international arrivals were still 71% below the pre-pandemic year of 2019.

Figure 2. Number of international arrivals, 2019-2022



Source: Data as collected by UNWTO, January 2023. Published: 17/01/2023

According to UNWTO, more than 900 million tourists travelled internationally in 2022 (double the number recorded in 2021 though still 63% of pre-pandemic levels), with every global region recorded notable increases in international tourist numbers. **The Middle East enjoyed the strongest relative increase** as arrivals climbed to 83% of pre-pandemic numbers, **Europe reached nearly 80% of pre-pandemic levels** as it welcomed 585 million arrivals in 2022. Africa and the Americas both recovered about 65% of their pre-pandemic visitors, while Asia and the Pacific reached only 23%, due to stronger pandemic-related restrictions which have started to be removed only in recent months.

As the world began to recover from the pandemic and travel restrictions ease, the tourism industry is evolving to adapt to the new reality. One of the main changes in tourism post-pandemic is a shift towards domestic travel. With international travel still restricted in many parts of the world, many people choose to explore their own country instead. This has led to an increase in domestic tourism, with many destinations seeing a rise in the number of visitors from within their own country.

Another change in tourism post-pandemic is the renewed focus on sustainability and responsible travel. The pandemic has made many people more aware of the impact of their travel on the environment and local communities. As a result, destinations are increasingly promoting sustainable tourism practices and encouraging visitors to engage in responsible travel behavior.

Technology is also playing a bigger role in post-pandemic tourism. Contactless and digital technologies are being used to make it easier for visitors to plan their trips and navigate destinations, while virtual and augmented reality are being used to provide virtual experiences for those who are unable or unwilling to travel.

Even if the COVID-19 pandemic has had a devastating impact on the global tourism industry, with many destinations experiencing a sharp decline in visitor numbers, for some places that were struggling with over-tourism before the pandemic, the sudden drop in visitors brought on by COVID-19 has been a blessing in disguise. Without the crowds of tourists, these destinations have been able to restore a sense of calm and tranquility that had been missing for years.

Venice, for example, saw a dramatic drop in visitors during the pandemic, with the number of daily tourists dropping from around 60,000 to just a few thousand. As a result, the canals of Venice became clear and clean, and the city's famous landmarks could be appreciated in their full glory without the crowds of tourists jostling for space.

Similarly, in Thailand, the popular island of Phuket saw a significant reduction in visitor numbers during the pandemic. As a result, locals reported a newfound sense of peace and quiet, with the beaches and other attractions empty and unspoiled. This has allowed the island to focus on sustainable tourism practices and rethink its approach to tourism in the post-pandemic world.

The pandemic has also given destinations the opportunity to reassess their tourism strategies and consider how they can manage visitor numbers more sustainably in the future. In Amsterdam, for example, the city has launched a new initiative called "Enjoy and Respect," which aims to promote responsible tourism and encourage visitors to behave respectfully and sustainably while in the city.

Overall, while the COVID-19 pandemic has had a devastating impact on the global tourism industry, it has also provided an unexpected opportunity for some destinations to reevaluate their tourism strategies and find more sustainable ways of managing visitors. For places that were struggling with over-tourism before the pandemic, the sudden drop in visitors has been a welcome reprieve, allowing these destinations to rediscover their natural beauty and charm.

Barcelona case study

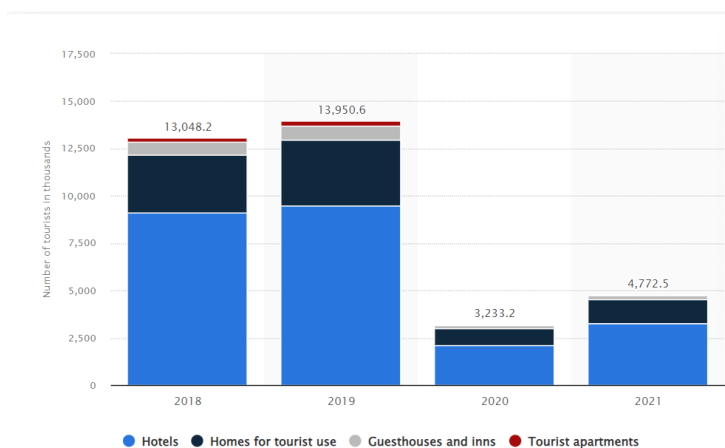
Barcelona, the capital of Catalonia, is one of the most popular tourist destinations in Europe, known for its rich culture, history, architecture, and vibrant nightlife. Before the pandemic, the city had experienced a significant increase in the number of visitors (30 million visitors per year), which led to overcrowding in popular tourist areas, such as La Rambla and the Gothic Quarter, and strain on infrastructure and resources. This also led to a loss of quality of life for residents with rising rent prices and the displacement of local businesses to make way for tourist-related establishments, as well as damage to the city's cultural and natural heritage, which eventually led to protests among residents. One of the most notable protests against tourism in Barcelona occurred in 2017, when a group of activists staged a demonstration in the city's popular La Barceloneta neighborhood. The group, known as "Arran," blocked access to a tourist bus and unfurled banners that read "Tourism Kills Neighborhoods" and "Tourism Equals Exploitation." In response to these concerns, the city of Barcelona has implemented measures aimed at managing the impact of tourism.

For example, the city has limited the number of beds available in hotels and apartments, restricted the number of new tourist rental licenses, and promoted more sustainable forms of tourism, such as cultural and nature-based tourism.

Barcelona has also been a popular destination for cruise ships, with the city's port being one of the busiest in the Mediterranean. Cruise ships bring large numbers of tourists to the city at once, overwhelming the city's resources and infrastructure. With up to 10,000 visitors arriving on a single ship, the city's popular tourist spots become quickly overcrowded, leading to long lines, congestion, and other issues. The environmental impact of cruise ships has also been a concern in Barcelona. The ships require a significant amount of energy and produce high levels of pollution, contributing to the deterioration of the city's air quality and water resources. In recent years, the city's authorities have taken steps to address the issue of over-tourism caused by cruise ships. Measures have been taken to limit the number of cruise ships docking in the city, and efforts have been made to promote alternative forms of tourism that are less reliant on large numbers of visitors.

The COVID-19 pandemic has drastically reduced the number of tourists visiting the city. In 2020, the number of visitors dropped by 80% compared to the previous year. While the loss of tourism revenue has been a significant blow to the city's economy, it has also offered an opportunity for the city to address some of the issues that had arisen from over-tourism.

Figure 2. Number of tourists in commercial accommodation establishments in Barcelona, Spain from 2018 to 2021, by type



Source: Statista, 2023

One of the most significant benefits of the pandemic on Barcelona's tourism has been the opportunity to reset the balance between locals and tourists. The sudden drop in tourism during the pandemic has allowed the city to take a step back and focus on rebuilding a more sustainable and responsible tourism industry. Without the crowds of tourists, the city has had an opportunity to restore its identity and offer locals the chance to reclaim their neighborhoods. The decrease in tourist activity has allowed for a cleaner and quieter environment in the city, with locals able to enjoy the city's public spaces without the usual noise and congestion. Barcelona is investing in sustainable

transportation, promoting eco-friendly activities, and encouraging visitors to explore less crowded areas of the city.

Furthermore, the pandemic has created a unique opportunity for the city to showcase its cultural heritage and authenticity. Without the usual crowds, visitors have had the chance to explore Barcelona's many hidden gems and experience the city's rich history and culture in a more intimate way. The city has been able to promote more authentic tourism experiences, with a focus on local food and traditions, creating a more meaningful and memorable experience for visitors.

But could this situation last once the pandemic is over or the city will be facing over-tourism again?

To address the issue of over-tourism in post-pandemic Barcelona, the city must come up with sustainable tourism management strategies that prioritize the needs of local communities and the environment. This could include measures such as implementing tourist quotas, promoting alternative modes of transportation, and investing in sustainable infrastructure.

In addition, tourism boards and travel companies should focus on promoting responsible travel and educating tourists on the impacts of over-tourism. This could include offering more sustainable travel options and providing information on how to minimize negative impacts while traveling.

Overall, the post-pandemic context presents both a challenge and an opportunity for Barcelona to address the issue of over-tourism. By implementing sustainable tourism management strategies and promoting responsible travel, the city can ensure that tourism can continue to be a source of economic and social benefits while minimizing negative impacts.

Conclusion

The Covid 19 pandemic had a strong impact on all sectors of economy, and even more on tourism industry. Although in most of the cases the impact of the pandemic was a negative one (the drastic decrease in the number of international arrivals, the reduced number of flights, a decrease of the degree of occupancy and overall economic income), there are also tourist destinations that benefited from this pandemic.

The pandemic has provided an opportunity for over-tourism destinations to reflect on the impact of tourism on their communities and environments. The challenge now is to find a way to balance the economic benefits of tourism with sustainable management practices that protect these areas in the long term. Maybe, demarketing practices can be used as a solution strategy in order to solve over-tourism in those destinations like Barcelona, Venice, Dubrovnik or Machu Pichu.

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LINGUISTIC, LITERARY AND CULTURAL FEATURES OF DIGITAL TRAVEL BROCHURES

Mariana COANĂ*

Abstract

Digital travel brochures have become one of the most effective and versatile tools of marketing. The paper aims to analyse three travel brochures created by Intravel and Cook Islands Tourism to identify the linguistic devices used by the advertisers. Since the brochures are promotional documents, we make an overview of the linguistics of advertising then we identify and analyse the features of the respective brochures, considering the layout, the vocabulary and language use, the techniques for creating persuasive language and the cultural context. The findings show that the linguistic and literary features are complemented by cultural features to enhance the whole experience of travelling. Therefore, we highlight how these features (language choices, structures, description strategies, emotional appeals, testimonials, local culture, etc.) contribute to the persuasive impact of the analyzed brochures.

Keywords: *travel, brochure, linguistic features, literary features, cultural features, advertising*

JEL Classification: Z13, Z32, Z33

1. Introduction

Digital advertising has become one of the most important tools of marketing strategies. This is essential in the economic, touristic, cultural life, etc., especially due to the competition between organizations in specific industries that strive to differentiate their products and services, through innovative marketing strategies. In the hospitality industry, digital brochures contribute to the attraction of new visitors even if “tourism is an intangible product as it cannot be tested before purchase [Bhatia, (2006: 247)].” The role of promotional communication has been investigated by many researchers. For example, while researchers analyze the motivation to co-create and how it mediates the relationship between online information sources and destination image [Garcia-Haro et al. (2021)], another study highlights the strengths and weaknesses of tourism websites, in a comparative content analysis of world’s top tourist destinations, from the perspective of tourism promotion, using the modified Balanced Score Card (BSC) approach [Singh & Bhatia (2016)]. Likewise, from the perspective of tourism advertising, many researchers have investigated the role of linguistics and semiotics in advertisements. The structural-linguistic theories, developed by R. Barthes, R. Linders, focus on the semiological analysis of the message. However, A. Stoichitoiu-Ichim (1997) contends that these structural-linguistic theories

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emphasize only the intentional meanings in the semiological analysis of the message, neglecting the socio-cultural context of communication and the active role of the receiver, who decodes the message and establishes its meanings. In the 60's and 70's, the advertising intensified and researches put an increasing emphasis on the awareness of the creation of advertising messages according to the interests and preferences of target audiences. That is why, we bring into discussion Greimas, who introduces the concept of isotopy [Greimas, (1966, 1976)] and proposes the analysis of the advertising message from the perspective of the advertising isotopy which “selects the referential elements from a certain natural language and gives them a denotative and symbolic status, and expresses the connotations in a set of persuasive signs (linguistic and iconic).” Greimas establishes three forms of advertising isotopy: the narrative isotopy, which is based on cultural references; the descriptive isotopy, which lists the qualities of the presented object; the argumentative isotopy, which ensures the connection between the fiction and the represented object [Greimas, (1966, 1976)].

This paper focuses on identifying and analyzing the the linguistic, literary and cultural features of three digital travel brochures which promote the European and the Cook Islands tourism. Brochures can be useful tools for students who attend English for Specific Purposes courses, in the sense that they give them the opportunity to get to know better the linguistic, literary and cultural features of these promotional documents. At the same time, the paper highlights the vocabulary and language used in the respective brochures and exemplifies how they have a persuasive effect on the reader to organize “the holiday of a lifetime”. As for the organization and structure of these brochures, we analyzed the sections of the brochures and the role of descriptions, which follow the headlines or slogans, in conveying accurate and catchy information. Last but not least, we analyze how the language and tone resonates with the interests or preferences of the target audience. Undoubtedly, the use of clear language and well-structured content enhances the accessibility and usability of the brochures. Positive language is used to describe the experiences of past visitors, emphasizing their satisfaction and encouraging potential travelers to follow in their footsteps. Cultural elements play a significant role in the travel brochures as they provide readers with a comprehensive understanding of the destination's culture and how they can engage in cultural experiences or participate in local events during their visit. Therefore, the use of persuasive strategies such as compelling stories, enticing descriptions, persuasive testimonials, and persuasive words or phrases create a desire to visit a destination.

Regarding the differences between digital and traditional brochures, in terms of effectiveness, user preferences, interactivity, and engagement, we believe that digital brochures offer many advantages such as multimedia capabilities, interactivity, and easy sharing to people who are computer literate, while traditional brochures create a sense of trust and provide tangible experiences to older people, who are not used to interact with new technologies.

2. The Linguistics of Advertising

When applied to advertising, linguistics focuses on the analysis of language use in promotional materials, such as advertisements, brochures, slogans, taglines, and marketing messages. The linguistics of advertising involves examining the various linguistic elements and strategies employed in advertising to convey messages,

persuade consumers, and shape perceptions. It explores how language is used to create impactful and persuasive advertising content. In this section we present the linguistics of advertising, considering the following key elements that contribute to the development of effective advertising strategies:

- *Language Choice and Style*: Advertisers carefully select language that resonates with their target audience, considering factors such as age, gender, cultural background, and regional preferences. The style of language used in advertising can range from formal and professional to informal and conversational, depending on the brand image and the desired connection with consumers. Checking the mechanics of messages and choosing an appropriate style and tone should be the primary goals of advertising campaigns.
- *Rhetoric and Persuasion*: Advertising always resorts to various rhetorical techniques to persuade consumers. Specifically, this involves the use of persuasive language features, such as rhetorical questions, emotional appeals, testimonials, comparisons, and claims of superiority. For example, a car advertisement may show a heartwarming family scene, triggering feelings of love, happiness, and a sense of togetherness. Or the commercial of a skincare product may showcase a celebrity endorsing its effectiveness, leveraging the influence and reputation of the individual to persuade consumers to try the product. Also, the use of phrases followed by exclamation marks like “Limited time offer, buy now!” urge consumers to react or take action. Many studies reveal the specific rhetorical strategies employed in advertisements and how they influence consumer behavior nowadays.
- *Wordplay and Creative Language Use*: Advertisements often employ wordplay, puns, slogans, and catchy phrases to grab attention and make the message unforgettable. For example, Nike’s “Just Do It” slogan encourages consumers to embrace an active lifestyle and overcome challenges, while McDonald’s “I’m Lovin’ It” creates a positive emotional connection with their food and dining experience. As technology evolves, researchers will continue to explore the creative use of language in online advertising, including the use of rhymes, alliteration, and other linguistic devices that impact the target audience.
- *Semiotics and Symbolism*: Linguistics intersects with semiotics in advertising, as language is used to convey meaning and symbolism. Advertisements often incorporate symbols, metaphors, and visual cues to communicate messages beyond the literal meaning of the words. The Apple logo itself is a good example of semiotics and symbolism. The bitten apple is a recognizable symbol associated with knowledge, curiosity, and the biblical story of Adam and Eve. Linguistic analyses can uncover the hidden meanings and associations embedded in logos and visuals. Dove uses symbolism to challenge conventional beauty standards (“Real Beauty”). By using diverse women of different sizes, ages, and ethnicities, the company promotes the concept of “beauty” through inclusivity and self-acceptance.
- *Branding and Tone*: Advertisements use specific language choices and tones to present the brand personality and values. Specific linguistic patterns and consistent use of language contribute to the brand image and positioning. For

example, the advertising language used by Airbnb often includes phrases like “Belong Anywhere,” “Live Like a Local,” and “Welcome Home” to create a sense of inclusivity, authenticity, and the idea of feeling at home while traveling.

- *Culture and Sociolinguistics*: Advertising language is influenced by cultural and sociolinguistic factors. Advertisers must adapt their language to the cultural norms, values, and preferences of the target market. Therefore, linguists’ contribution to localization services is crucial since they can examine how cultural references, idiomatic expressions, and language variations can be used in advertising to connect with specific audiences. For example, an advertisement targeting a Romanian-speaking audience in Spain may use language variations specific to that community, such as including Romanian phrases or references to culturally relevant events.

3. The Analysis of the Cook Islands and Intravel Brochures

Our study is based on three digital travel brochures, created by agencies for various tourist attractions in the Cook Islands and Europe. The different types of reasons that travel companies create digital informational text include to voice their reputation, to describe their offer, to guide, to inform, to advise, to warn, to explain and to persuade potential visitors to buy the tourist package. Travel brochures are considered promotional documents as they advertise vacation packages, specific destinations and tours, hotels and exotic places. Therefore, our analysis showcases not only the common linguistic and literary features and structures found in the selected tourist brochures but also their cultural features highlighted through the use of advertising discourse.

- *Vocabulary and Language Use*: When designing a brochure the most important thing that one should notice is the visual balance between the photos, color schemes and the textual information. The psychological effects of colors and the informative effects of descriptions can influence the tourist’s choice of a destination. The respective brochures use rich and descriptive vocabulary to create a favorable impression of destinations in the Cook Islands and Europe. For example, they frequently use positive and superlative adjectives, and catchy language to entice potential visitors. Moreover, they employ specific terminology related to local attractions or amenities, cultural activities and landmarks to provide further information about the destination.

“Our little paradise is home to the entertainers of the Pacific, displaying the essences of Cook Islands heritage. A Cook Islands cultural dance show or island string band is just what you need to add that extra island flavor to your special day.”

“Vai Nauri is the largest, freshwater cave in Mitiaro and is immensely popular with both locals and visitors alike.”

“This holiday follows the wine route of Alsace, a region rich in heritage, culture & gastronomy where valleys are characterized by well-kept vineyards and impossibly pretty villages.”

The use of local language, translated or explained, is meant to assist travelers in engaging with the local community (see the examples below). This linguistic support

connects visitors with the culture and facilitates interactions with locals. Moreover, they include information about the community, its history, art, crafts, traditional practices, and what opportunities are given to visitors for cultural immersion experiences.

“A lot of the farmers believe that the food crops grown in their plantations are “the food of our *tupuna* (ancestors).”

“Get amongst the local mama’s and learn the art of *tivaevae* making! The mama’s love sharing their knowledge and stories about how they learnt to sew and make many other crafts in Mitiaro.”

Finally, we identified the companies’ intention to give the language of brochures a deeper meaning and sensation through metaphors and similes. Unlike the Cook Islands brochures, the Inntravel brochure highlights its branding strategy on the first page, using poetry techniques such as repetition of words, alliteration, rhyme and rhythm. The verses contain the adjectives “slow”, “revitalized”, “refreshed” and “energized”, and the verbs “immerse”, “meet”, “eat”, “explore” to explain the concept of “Slow holiday”, to get attention instantly and draw the readers in, as shown below:

“What do we mean by Slow?
 Slow is a state of mind.
 Slow is looking differently at the world.
 Seeing things – people, landscapes
 from a new perspective.
 Slow is a place.
 Slow is where time doesn’t stand still,
 it expands.
 Where you see more by slowing down.
 Immersing yourself into local life...”

If we apply Jakobson’s theory of language (1960), we observe three functions of the language used in travel brochures as follows:

- The referential function, which focuses on conveying factual information about the destinations. Sometimes words from the local language are used to highlight the essence of a place and to create a desire in the readers to visit the place.

“The Loire Valley is famous for pretty rivers and dazzling châteaux built by France’s royalty.”

- The conative function, which is aimed at influencing or persuading the reader.

“With two nights in charming Middleham, you get to start your holiday with a visit to the striking ruins of the town’s castle, dubbed ‘Windsor of the North’ as it was the favorite home of King Richard III.”

- The poetic function, which focuses on the aesthetic and creative aspects of language, highlighting the form, structure and artistic use of language, often found in poetry and literature.

“Nothing beats a striking sunset, as the sky erupts in a masterpiece of gold, orange, purple and pink perfection.”

The way information is conveyed through travel brochures is very important, as the goal is to color the language to motivate or win over the receiver. Therefore, the use of various literary devices, such as metaphors, rhymes, alliterations, even names of tours adapted from the title of books can create an emotional connection with the readers. For example, the name of the tour “A Trail of Three Cities. Seville, Cordoba & Granada” was influenced by the title of the historical novel, “A Tale of Two Cities”, by Charles Dickens.

The choice of language and style aims to resonate with the interests and preferences of a broad target audience. By incorporating an inclusive, a friendly yet a professional language and tone in the brochures, the organizations promote equality and respect for all readers. Thus they create an environment where everyone feels welcomed. The visual and graphic elements provide a visual representation of the destination’s attractions and are placed strategically to support the textual information.

- *Persuasive Language:* The brochures are designed to persuade readers to visit the Cook Islands and countries in Europe such as United Kingdom of Great Britain, France, Italy, Slovenia, Greece, Spain, etc. They rely on persuasive techniques - superlatives and especially sensory language - to elicit emotional responses and create a sense of desire to visit the heart of Yorkshire Dales, the Jersey Island, the Loire Valley, villages of the Dordogne, Gironde’s vineyards rivers & valleys, Austria’s Stubay Valley, Leutasch Valley, the Valley of Gold in Portugal, Madeira, Tenerife, etc.

“Mitiaro has a distinctive story, plus the unique appeal of some of the most stunning subterranean limestone pools and caves in Polynesia.”

“Stunning views continue below the crystal clear waters where marine life is abundant, colorful and diverse in the lagoon.”

“Infused with Gallic influences, and abundant with succulent seafood, rich dairy ice-cream and those famous potatoes, Jersey is an island to savour.”

Since they are personalized and customized to meet the specific needs and preferences of potential travelers, digital brochures can lead to travel planning through instant decision making. Also, persuasion and brand recognition are enhanced through the travelers’ testimonials or reviews of the travel experience:

“The abundance of wild flowers was just astounding. Views to die for and everything you expect from Greece: blue skies, white villages and nice people; and the food was pretty good, too.”

“This was the most beautiful walking holiday we have ever done. The whole of Slovenia is beautiful, unspoiled and well cared for – we ate superbly, breathed wonderful air and drank pure delicious water. The walks were utterly beautiful, a bit challenging on day one, but fabulously rewarding!”

- *Structure and Organization:* The brochures have a clear structure and organization to convey information effectively, by guiding readers through the content logically, from an initial introduction to more specific information. The introduction of the Mitiaro and Raratonga brochures provides a brief description of the location and its unique features such as One big resort, The ultimate family destination, The needle, Hiking and beyond, and Getting around is so easy!.

The Inspirations brochure created by Intravel provides an overview of the company, describing itself as a travel company whose activity concentrates on *Slow Holidays*. A slow holiday allows “visitors to take the time to savor every moment, fully engage with their surroundings and experience the chosen destination *up close*, much as the locals do.” Also, the company details how its mission subscribes to the principles of sustainable tourism.

The body of the brochures is divided into sections, each focusing on different aspects like key attractions, landmarks, cultural heritage, activities and experiences that capture the essence of the location, accommodations, maps, domestic air travel, currency & banking, transportation, telecommunications, weather, electricity and contact information. Each country or region is introduced by an attention-grabbing headline, superlative adjectives, slogan or quotation of famous people, followed by a brief introduction highlighting the attractions of the destination:

[France

A feast for the senses

“*One cannot impose unity on a nation that has 264 kinds of cheese*”, Charles de Gaulle is said to have complained. For us, though, France’s rich regional variations are a cause for celebration – from its superbly diverse food and wines to scenery that includes both the graceful Loire Valley and the wild and untamed Atlantic Pyrenees.

Heart of Europe

So beautiful, so traditional and truly distinctive

“*We will either find a way, or make one*”, said a determined Hannibal, on reaching the Alps with his army around 200BC. Over two thousand years later, we’re still finding new ways through the heart of Europe, and the lofty lands of Austria, Germany, Switzerland and Slovenia are a constant source of surprise – and delight.”]

The Attractions and Landmarks section describes specific attractions and landmarks in Raratonga, Mitiaro and Europe, their historical background, unique features and special considerations for visiting such as nights, meals, dates, prices and contact information. Information about lodging options in the destination is included in this section. It features descriptions, images, and details about family hotels (“For almost five centuries, the Plesnik family has lived and worked in this enchanted valley, protecting the environment and preserving their culture...”), resorts, guesthouses, or other types of accommodations available. The Dining and Cuisine section in each brochure focuses on the local culinary scene and dining options. The Inspirations brochure includes not only descriptions of popular local dishes, but also descriptions of restaurants, cafes, street food, or food markets. Information such as cuisine types, specialties, and recommendations are provided. The brochures conclude with a section providing contact details and websites where readers can find more information or make inquiries. Social media handles and QR codes related to the destinations are also included.

4. Conclusion

Travel brochures evoke emotions through compelling descriptions and persuasive techniques, which are intrinsically linked to the human desire to discover new places and learn about new cultures. The paper analyzes the linguistic, literary and

cultural features, as they shape the advertising strategy of the investigated travel brochures. Our study uncovers the persuasive techniques, discursive practices and the creative language used to influence the readers. In conclusion, the text samples illustrate how the specific vocabulary, literary devices, descriptive and persuasive techniques are employed so as to evoke positive emotions and create a connection with potential travelers.

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THE LANGUAGE OF (UN)PALATABILITY, (IN)DIGESTION AND BEING FED (UP) AT THE THRESHOLD BETWEEN THE 2 HS – HUMOR AND HORROR – IN *THE MENU*

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Abstract

The paper looks at the 2022 film production The Menu, which is a horror comedy that manages to be convincing – we shall argue – because of the smart manner in which language is used. We start from a justification for this idea, finding it in the first scenes. Still in the introductory part, we establish the roles of the main character, Margot, as well as some of the features of her companion, Tyler, and state the functions played by language that shall be followed throughout the whole analysis in the way it is used. The body of the analysis focuses on the terminology specific to the field of food and cooking, looking at the people involved or staff, procedures, insights on the cuisine served and the show that the experience turns out to be, and, last but not least, the descriptions of the courses and the hints that they provide on the situation. The final part of the investigation bearing on the dishes is not only descriptive, assessing the lexis, but also looking into the intricacies of language use, namely its psychological effects and subtle impact, the way in which it blends horror and humor, boosts tension gradually, and creates reality at the threshold of competing outlooks on fine dining which see it as either deserving art or arrogant nonsense. The approach is a blend of linguistics and cultural studies, with a focus on the collaboration between language and psychology, paying attention to how the former creates the dynamic of the other.

Keywords: *food culture, haute cuisine, identity, psychology, linguistics*

JEL Classification: Z10

1. Introduction. Why language – an argument

In the cinematic production *The Menu* of 2022, Chef Julian Slowik, a master of fine dining, invites a party of twelve people on Hawthorn Island for a degustation, with the intention of killing everyone, including his staff and himself by the end of the night. He puts up a performance, introducing every one of the five courses with a preamble-discourse related to the theme of the respective dish, all of which make up a symphonic whole culminating with the dessert, for which the guests symbolically become ingredients dressed up as sweet sophistications only to be set on fire. The most prominent couple is foodie rich-boy Tyler and Margot – an escort who replaces his ex-girlfriend, and the only one who in the end makes it out of the island alive. Far into the midst part of the film, we realize that Slowik bears a grudge against all the guests, with

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the exception of Margot, who is there accidentally, and that the dinner is in fact a punishment, but also meant to be a final lesson for their sins, of arrogance, carelessness, exploitation of and disrespect for others and art. Lillian Bloom, who is accompanied by her editor, Ted, has often made snide comments on Slowik's work along his career, as well as destroyed others'; despite the fact that Richard and Anne Leibrandt are regular customers, he is unable to name a single dish that he has served in the chef's restaurant; the once successful film star George Diaz is accompanied by his assistant, Felicity, whom he has taken for granted and kept as a mistress through the years, a reason why she wants to move on and leave him; Soren, Dave, and Bryce are cocky businessmen who have gotten involved in illegal transactions and deceived innocent people; Slowik's own alcoholic mother was unable to protect him from a violent father and from trauma during his childhood.

The introductory scene of the film makes it clear from the very beginning that what is about to occur is an extremely exclusive event, as the total number of the customers is twelve, which would apparently make it unprofitable, except that every individual is, in a compensatory manner, charged "1250 a head" (McKay *et al.*, 2022). The uniqueness of the occasion is emphasized as well through the way in which Tyler tries to prevent Margot from smoking, with arguments of the type: "It will kill your palate.", and hence "ruin your ability to appreciate them" i.e. the "super delicate" "flavor profiles" (*ibidem*). Besides drawing our attention to the experience and highlighting its once-in-a-lifetime quality, putting it forward as expensive, out of the reach of every-person, an honor to be part of and a complex event, it introduces us to the sphere of *haute cuisine* through the last phrases mentioned above. If one discusses flavor profiles, then (s)he is clearly a connoisseur, automatically leaving every-person a bit dumbfounded, with the effect of feeling a novice at what is about to occur, and consequently inappropriate and even excluded to some extent. We are made to feel a bit small, or at least aware that this is the way the ones in the know will perceive the others, who are not, as outsiders and rednecks who lack the style and class to appreciate what will be going on – kind of like Margot. Her lines place her at the other end of the spectrum, in the shoes of the rookie, of every-person, of the inappropriate, but also, at the same time, of the one that the masses can relate to – so, likable, congenial – and moving ever so slightly to the role of the circumspect who is treading the fine line of mocking the pretentiousness of it all as arrogance and snobbery, and, through this, the person who has a healthy common sense (the implication being also – unlike the others). Margot's lines make this stand – her placing herself at the opposite pole from the overenthusiastic Tyler – visible: to his request not to smoke so as to avoid ruining her palate she exclaims "Fine. Jesus.", and when she finds out how much the experience costs she replies, after a curse, "What, are we eating a Rolex?" (*ibidem*). Her jokes and unpretentious, colloquial language bring her closer to the regular receiver of the information, to the "girl next door", as she characterizes herself, and in contrast with Tyler's uppity attitude (*ibidem*). She indeed condenses in her personality producer McKay's declared intention of putting an exclusive culture under a question mark (De redacția online Zile și Nopti, 2022).

From the start of the movie, it is evident that the characters' *language provides invaluable hints* as to who they are, the categories that we can place them in, their personality features, the way they are perceived and received by the viewers,

influencing us and telling us how to see them, *manipulating our outlook and/or teaching us ways to look* at them and at the experience that they are about to have. Tyler and Margot's ways of speaking propose alternative ways to consider the same reality. At the same time, *language creates tension and opposition* as early as this introductory part, alongside humor and irony, *blending possible approaches of the same situation, mixing in these approaches ingredients like: humor and the comic; the relaxedness and unpretentiousness of every-person; the posh and/or arrogant and/or potentially elitist, exclusive and/or elegant stance; but also, among all these, the tension coming from contrast that will ultimately and gradually evolve into horror*. Language shows its importance at this early stage of the development of the action, pointing, through the way in which it is used by the two characters, to the manner in which it will hold the roles of manipulating emotions, of pacing the dynamic of occurrences, of creating suspense and of combining the opposite stances of humor and horror, either passing rapidly from one to the other or holding them present together simultaneously. In this quality, language is profoundly intertwined with psychology. Last but not least, as we shall see, *language and the manner of speaking supplies for Margot – who turns out to be the protagonist – the ruse for her escape*, in the context in which everyone else shall die. In the end, the right words create the appropriate psychology in context, triggering the desired reaction.

In what follows, we shall analyze the way language fulfils the functions introduced above. In order to manage this, we will have a look at it not only in terms of specialized, specific vocabulary, i.e. the one of (*haute*) *cuisine*, or register (which we have already pointed out above), but also pace, a quantitative and qualitative glance, metaphorical suggestions, and from a pragmatics perspective, following the implicatures.

2. Food terminology and creating effects with it

What is evidently the central happening of the film is a gourmet tasting and the object of "*haute cuisine*" or "*grand cuisine*", i.e. "the cuisine of 'high-level' establishments, gourmet restaurants, and luxury hotels", "characterized by the meticulous preparation and careful presentation of food at a high price", involving "premium ingredients", "exotic and varied flavors", "complex techniques", "looking like architectural wonders" and characterizable by adjectives such as "extravagant", "rich" and "opulent" (*Haute cuisine*, 2022). We shall examine the language used to describe the people involved, the procedures or actions resorted to, the insights on food, the terminology depicting the actual dishes, as well as the impact, effects and consequences of the language on the reception of the cultural object that the film represents, in other words what language manages to do in terms of shaping perception for both those inside the cinematic world and those outside it.

2.1 People

Lillian Bloom distinguishes herself among the guests from the beginning, as she comments on the culinary experience the most. Described as a "food critic", she acts as an authority in the field, who can pass judgements that are deemed valuable, trustworthy, entitled and noteworthy, which makes her more enlarged and significant verbal inputs on food (in comparison with the other guests') in the film logical (McKay *et al.*, 2022). She

discovered Slowik, at times being dismissive and critical towards his work throughout the years. Tyler uses the term “foodie”, i.e. a person eager to have food tastings, and informed about and interested in gastronomic experiences, to designate someone else in the film, but the characterization would apply to him as well (*ibidem*).

Slowik is, of course, “Chef” (*ibidem*). The way Elsa, his right hand, uses the word as a title, without the definite article, and pausing after she pronounces it as if almost taking a moment, suggests, primarily, Slowik’s power position, authority, and aura of nobility. However, in the suggestion of utmost respect entailed in the special use of the term, we also feel an extra meaning component, namely a touch of excess, a kind of deference that goes beyond what is unanimously deemed as normal, which becomes suspicious, as if he were more than a central figure or role model, taking up godly qualities. The respect in Elsa’s voice seems just a tiny bit off, as if something were not quite right. It very subtly points to how Slowik becomes more of a sect leader figure, having brainwashed all his apprentices into followers, instead of a teacher. When the guests are shown the cottage where Slowik lives – but only on the outside, as nobody is ever allowed to enter – Margot, the voice of conscience, jokes about him being “the Lord High Emperor of Sustenance” (*ibidem*). To be more precise and practical, Slowik is “Executive Chef”, as he describes himself, which is different from the Chef-Owner, the one who would also hold the restaurant instead of merely managing or running it (Different Types of Chefs, 2022).

Elsa describes the staff as a “family”, instead of a group that displays “*esprit du corps*” – as one of the guests puts it (McKay *et al.*, 2022). What these very brief characterizations do is draw our attention to how involved the people working in the art of *grad cuisine* can get and are, as well as indicate indirectly the special nature of the business, implied by the way in which superlatives are resorted to to characterize the professionals, specifically Slowik’s team, this special nature being the reason why they get so caught up in it. The use of a French phrase brings the flavor – if we were to employ a pun – of sophistication and elegance as features that the speakers mean to associate with the art and practice of cooking, as knowing French or a foreign language makes one intellectual and thus refined. Also, French would be the appropriate language in context, as a lot of expressions and terms belonging to the specialized terminology in question were historically borrowed from it.

Jeremy Loudon is the member of Slowik’s team who will commit suicide as an illustration of the way in which someone who has failed to be great enough or is *manqué* in his vocation can make a “mess” out of his existence. He is called a “*sous-chef*”, the “Second Chef, Under Chef”, i.e. the right hand of the head chef (Different Types of Chefs, 2022). Slowik’s visible personnel is most likely made up of senior chefs (*chefs de partie* or station chefs, who manage the stations) and specialized chefs, experts in various areas, such as sauce chef, meat chef or pastry chef (*ibidem*). The other positions that are equally not pronounced as such, but are implied and evident, are Elsa’s, who, we realize, plays the part of the “*maître d*”, welcoming guests, seating them at the tables as well as having other management duties, and a sommelier in charge of wine services, who comes to Tyler and Margot’s table a few times to bring in various assortments of the beverage (Restaurant Job Descriptions & Titles, 2022).

2.2 Procedures

During a tour on the premises, the guests are explained that the dairy cows' meat is kept in the smokehouse for 152 days to "age" and "relax the protein strands"; in case it is served on the 153rd day – Elsa explains to a curious camper – the altered bacteria shall enter the person's blood flow, reach the spine, and cause paralysis and subsequently death, which is all, of course, avoided, as they are "pros" (McKay *et al.*, 2022). Elsa's language mixes her apparently usual manner of speech, which is, as expected, pompous and aloof, with an informal one, but which she uses as a concession made to the others, unversed in the mysteries, subtlety and profundity of the secrets of food preparation (as opposed to who and how she is), and thus less fortunate, but also less refined, intelligent and elegant. Whenever she nevertheless concedes to use informal or colloquial language, she does it from the full height of her skill, in a manner similar to how an adult would use a child's gibberish to become the child's equal in his/her immaturity or innocence, but with an extra condescending ingredient in Elsa's case, as if she accepts to stoop low, to become a fool to level with the redneck rookies. That is the impression rendered by her as she repeats the phrase used in the question addressed by the curious guest, i.e. "all hell would break loose", to describe the effects of imperfect timing in consuming the meat (*ibidem*). Elsa's language contains the essence of what the *haute cuisine* culture mongers are stereotypically portrayed to display in terms of attitude on the negative side: apparent excessive politeness which in fact hides arrogance, haughtiness, derision towards those who are outsiders, the apparent desire to serve people covering in reality a need to make fun of and even scorn the ignorant in the field, and, we can further speculate, a tendency towards perfectionism in a sphere that seems more manageable and that hides and compensates for a sense of failure in other areas of one's life i.e. a compensation effort "to make up for a deficit" (Hayes and Stratton, 2022: 67), a sublimation or displacement mechanism, i.e. "the redirection of instinctual energies towards more socially acceptable goals" (*ibidem*: 362), and a superiority complex masking an inferiority one. Later in the film we see the way in which Elsa confirms these character features mentioned last as, the moment she is under the suspicion of having made a mistake, her leading role is threatened by Margot and she feels the danger of being replaceable hovering over, Elsa's psychotic criminal inclinations are triggered, and she pursues the protagonist with a knife (and not only) with the clear intention of killing her for no other fault than seeming to be fit to take her place.

The apparently light manner in which Elsa quips, combined with the comic of having everyone *bouche-bée* at the dire consequences that they might face as a result of the staff making any mistakes, the group laughing forcedly and unconvincedly while in fact terrified, along with the horrific picture of a slow and painful suffering and death create the unique blend of humor and horror permeated with the ingredient of the absurd that this scene introduces in the context, as it is, of course, unfathomable for one to die from eating meat one day later than one is supposed to, especially given the lengthy duration of the intended aging period for the meat. Elsa's speech and the mix of exaggeratedly formal, polite language with condescendence, black humor and the horrendous create tension and slowly slip us into blurry expectations, preparing us for the dreadfulness to come.

Verbs describing the actions taken for the preparation of the food are enumerated by Elsa during the initial tour of the property: “harvest”, “ferment”, “slaughter”, “marinate”, “liquify”, “spherify”, “gel” – all preceded by the pronoun-subject “we”, to suggest the unity of the team; “innovate” is what the cooks do before the guests (McKay *et al.*, 2022). The enumeration of these actions is meant to suggest quite a number of things: the complexity of the work involved, its seriousness (giving the work symbolical weight), the knowledgeability and thus professionalism of the makers, and, through these, the privileged nature of the guests for having the opportunity to attend the demonstration, and perhaps, ambivalently and sarcastically, that they are both lucky/worthy and not necessarily worthy of having the experience. In the enumeration, Elsa uses the verbs as ammunition, spits them, launching them as weapons in order to show off and to manipulate the others’ feelings.

Nouns referring to devices used for procedures also appear among the specific vocabulary of cooking. A “Pacojet”, which Tyler notices a cook to be using, “can produce a powderized, snow-like texture”; an “immersion blender” is used to get a “hyper-decanted” wine (*ibidem*).

Examples of adjectives that describe the procedures and techniques used for cooking will appear in section 2.4, dedicated below to the actual courses and dishes, and are to be expected in the context. At this point, we are just going to mention the fact that they are not only of the neutral type (of which examples will be given in the section indicated in the previous sentence), simply mentioning the technique used for the respective raw material, but also negative, describing failed procedures, such as in the second-course emulsion that seems “split” or “broken” – something that Bloom notices (*ibidem*). She tells Ted how she makes her own bread that is “rustic”, “peasant-like”, “yeasty” – adjectives that suggest procedures, even though they do not describe them *per se* (*ibidem*).

2.3 Insights

Tyler introduces the notion of interpreting the way the experience and the dishes make one feel, by mentioning “the balance of the products” or “the mouthfeel of the mignonette” (*ibidem*). However, the expert who has the most numerous entries in this respect, as well as the most superior, is Lillian Bloom.

Lillian Bloom calls the venue a “biome of culinary ideas”, which “functions like an epicurean salon”, as Bloom’s companion and editor, Ted, puts it, who seems desperate to look in-the-know, to please and be validated, so he resorts to the arsenal of the most sophisticated language and allusions in order to appear as smart; but Bloom corrects him, saying that “biome” is the more appropriate description – to which he, of course, gladly and immediately concedes (*ibidem*). Margot, who overhears the exchange, concludes, as the voice of reason that she represents: “We have reached the base camp of Mount Bullshit.” (*ibidem*) The pair’s exchange introduces two notions coming from other very different fields of science, namely biology and philosophy, respectively a noun and an adjective: the biome and the epicurean approach. What this achieves is point to a connection between food and food sampling, on the one hand, and the other two spheres of knowledge dragged into the picture, making us understand that this art/practice that constitutes the central theme and context of the film is related to life/living and to life philosophy. Another thing that the analogy manages is to claim

profundity for the experience, as, since it relates to the origins and study of life itself as well as to theorizing about existence, it is deep and meaningful beyond appearance, which means that it should not be trivialized. The biome is a perhaps more scientific and showy term for an ecosystem or habitat, in the sense that regular people who are not specialized in biology would probably tend to know the meaning of the latter term rather than that of biome. This choice of the synonym less likely to be known by every-person relates to the inclination to elitism and snobbery, and to a desire to present the preoccupation with gourmet food as not for everyone, on both the production and the reception ends. Epicureanism is related to the Greek philosopher Epicurus, who lived around 300 BC, and to his teachings that encouraged people to the pursuit of happiness as the ultimate goal in life. His doctrine illustrated an empirical approach to life, to knowing it through what is palpable and through the senses. It was hedonistic, seeking for pleasure understood intellectually, as avoidance of suffering – i.e. “*aponia*”, the “absence of pain”, and “*ataraxia*”, the peace of mind – rather than that of the senses, so prioritizing the pleasures of the mind as superior to those of the body (Epicureanism, 2023). The corresponding adjective, epicurean, has come to mean something related to this trend of thought: a person “fond of or adapted to luxury or indulgence in sensual pleasures; having luxurious tastes or habits, especially in eating and drinking”, or “fit for an epicure” (or *connoisseur*) (epicurean, n.d.). We notice that the adjective denotes either someone that is in pursuit of luxury and refinement or someone who already possesses these features, i.e. either the aspiration or the accomplishment. The ambiguity and ambivalence reunites the two stands that all the agitation in the film is about, and which all the characters, except for Margot, are trying to prove themselves in: if they cannot be the makers of taste, they at least strive to prove to the others that they have good taste. The position nobody wants to be occupying is the complete ignorant in those matters – again, with the exception of Margot, who is the only one who does not struggle to prove herself or to appear as being something more. (In a parenthesis, the observation being made, is this the reason why she is the only one who makes it out of the experience alive? Is her less hypocritical nature what ultimately makes her the only one worth saving? Perhaps. Or, on a more philosophical and extreme note, is it an inability that excludes her from being part of the food chain and experience, and should be seen as a kind of punishment, her having missed the more profound meaning of it all and having remained on the outside of life itself – while paradoxically living – failing to complete the ultimate stage of living which is dying/extinction? Again, food for thought – pun intended.)

As we have already contended, Lillian Bloom is the character most likely to emit judgements and assessments of food in the most arrogant and knowledgeable manner, which she does. She describes the plate of the first course as displaying a certain “neediness”, as being “half-great” and “there in moments”, but still, in the chef’s defense, “clean” and “thalassic” i.e. “oceanic” (McKay *et al.*, 2022). She reads subtleties and interprets, seeing and assessing the concept, plunging into the why and how rather than the what, referring to the story behind the courses, its rationale, as well as even the feelings and drives that the food illustrates. The other characters have much drier descriptions: the movie star says it is “good”, one of the party of three young businessmen describes it as “solid” or “suburban landscaping”, which are linked more with denotation than connotation (as in Bloom’s speech) (*ibidem*). She refers to the

provocation in the second course, consisting of its meagerness up to the point of suggesting mockery, as “fiendish” and “outrageous”; editor Ted characterizes the event that clearly becomes, by the fourth course, a performance, as “theatrical but minimalist” or “*minimirasuto*” in Japanese style, and “playful”; subsequent to Louden’s suicide, which creates a dish called a “mess”, Lillian claims that it is “stagecraft”, as if in an attempt to convince herself that it cannot be real (*ibidem*). Slowik himself characterizes the experience as a “show” and as “exclusive”, and at some later point reveals the guests as “ingredients in a degustation” (*ibidem*). The *umeboshi* is “fantastic”, with “waves of ferment” that can be felt while tasting it (Bloom points out), Tyler’s lamb with vegetables is “bullshit” in Slowik’s terms, Margot’s cheeseburger is a “real” one (*ibidem*). The last part, the dessert, is made to illustrate the “ruin” of Slowik’s life and art, so it needs to be awful, “the most offensive assault on the human palate ever contrived”, which is probably sugar as a substance and, moreover, a plain version of it, i.e. everything that is “wrong” with people and which is nevertheless associated with “innocence”, “childhood” and “Mom and Dad”; hence, it needs to be purified by fire that transforms the participants, who are thus “cleansed” into “martyrs” or “heretics” (*ibidem*). The vast majority of these adjectives are subjective, opinion ones (Adjective order, 2022). Some of them pertain to classy, formal vocabulary, and/or poetic language – mostly those used by Bloom and Ted. Her words and word associations manage to be evocative, as they are rich in connotations. But even Bloom sometimes uses simple superlatives that acquire a lot of weight, given her expertise. The others use informal, plain opinion adjectives, like “solid” or “good”. Colloquial terms – this time nouns – are made to insult and criticize some dishes, mainly Louden and Tyler’s. Some of the adjectives almost personify the food as if it were an agent, endowed with intention and volition, meaning to act towards certain ends – an example being Slowik’s use of “offensive”. The (sometimes radical) contrast between pretentious descriptions and colloquial, very simple ones, contributes to tension build-up.

Margot is the voice of reason and of the every-person, who pinpoints what the courses seem like to such an individual, who has no particular interest in the art of gastronomy and who is more practical-minded rather than a philosophical enthusiast. To her, the first course, the theme of which will be the island of Hawthorn, is resumed as a “rock”, when she encourages Tyler “Just eat your rock.”; the second is an attempt at “basically insulting” the customers because of its puniness; during the third, which consists of tortillas engraved with embarrassing moments, as she feels insulted, she signs and calls Elsa to take the food back – and is the only one who dares to do that, while Tyler, depicted as photographing the food on the tortilla feels guilty and thinks of a way to “make it right somehow” (McKay *et al.*, 2022).

2.4 Food description

The first instance of actual food description is on the boat to Hawthorn Island. The first dish introduced by Chef Slowik is “raw local oyster in a *mignonette* emulsion with lemon caviar and an oyster leaf” described by Tyler as “one of his classics” (*ibidem*). The emulsion has a foamy consistence, probably intended to suggest the sea foam formed by waves crashing to the shore, and the noun “lemon” is used to point, for the caviar, to its yellow color, so employed metonymically – “replacing a word or term with something associated with it” – and metaphorically – achieving “a direct comparison

between two unrelated things” – at the same time (“Figure Of Speech”, n.d.), the same as the noun “leaf” made again to indicate color, i.e. a small amount of green jelly used on top, as if mainly for decoration purposes. *The combination of metonymy and metaphor* plays a vital role in these haughty food descriptions, because it serves the function of suggesting rather than pinpointing, the very mental process of connecting the dots between the hinted and the actual reality being considered elegant, subtle and intelligent, features that would hopefully transfer to the food to characterize it as well. This very artifice is metonymic and metaphorical itself. The food tells a story, providing either through its constituents or in its appearance, visually, a symbolism and a background, following a thread and telling a narrative. This translates into the idea of the food concept, and it will be detailed by Tyler a little later on, as they reach the location of the event and are seated at their table, having begun the culinary experience.

Tyler seems to be knowledgeable about the actual ingredients, explaining that the yellow color of the so-called caviar is given by “alginate”, i.e. the pompous term for a composite made of algae which Margot describes, using language at the opposite pole, which is simple and humorous instead of superior, as “pond scum” (McKay *et al.*, 2022). Tyler’s pompousness, or the trope of “grandiloquence” (i.e. “grandiose” speech or terms), is achieved with the help of the hyperbole, i.e. “an emphatic exaggeration” that Tyler resorts to through superlatives from his first lines in the film (“Figure Of Speech”, n.d.). As soon as he refers to the culinary experience, in his discussion with Margot, he characterizes it as “huge”, “magical”, “madness”; when he likes a sauce he exclaims “embalm me in it” (McKay *et al.*, 2022). His choice of words suggests that his expectations rather aim at something ostentatious, flamboyant, edgy, targeting the out-of-the-ordinary for the sake of showing off rather than for actually experiencing or experimenting. In and through his words, Tyler reveals himself as superficial, a man of appearances rather than essences. He also reveals himself to be a man of extremes, his vocabulary hinting at a potential lack of reasonableness, composure and even at psychological imbalance. Even though he truly knows his food, we are left with the impression that his interest is fueled by the luster that it provides for the experiencer before others rather than what he feels while experiencing. In fact, it will soon become obvious that he does not feel much, in the sense that he displays psychopathic traits, since he goes to the event knowing that everyone will die, has invited Margot to it just to have some company – again, knowing fully well that she is bound to be killed and making this decision in her stead – and does not seem to care much for his own life – all of which determine us to seriously question his ability to feel anything relevant generally speaking. His seeming incapacity to feel empathy when it comes to serious matters, such as people’s suffering and life loss, contrasts with his enthusiasm for food details and the prospect of the luxury and polish involved in the outing, a contrast which only manages to make him look utterly deranged. The naturalness with which he acts out this irrationality is chilling, as if he were a monstrous child, who gets (over)excited about the things that we have mentioned, and manifests this excitement in his descriptive language, getting even to become lyrical and philosophical, but is incapable of feeling guilt, remorse or fear related to the fact that he has knowingly brought Margot and himself to their own deaths. To sum up, in Tyler’s case the way he speaks points to character and offers cues as to how he truly is at his core.

Just to have a look at Tyler's lyricism and philosophical bent, expressed while in the mindful but excited mood that he gets anticipating the tasting of Slowik's dishes, we may quote here a fragment from his diatribe: chefs are worth idolizing, unlike achievers in other domains, because they "play with the raw materials of life itself. And death itself."; gourmet cuisine is "art on the edge of the abyss, which is where God works too" (*ibidem*). *Hyperbolization* is in place in these lyrical-philosophical descriptions more plainly than ever, contributing to the presentation of gastronomy as vitally important (perhaps above all else), and of the chef as a demiurge, rightly and logically almighty. *Allegory* is in place as well, likening cooking, eating, offering food and consuming it as a dynamic encompassing (the meaning of) life and living, which are the "overarching theme" or story that they portray, Chef being the "storyteller" (Tyler's phrases) (*ibidem*). The same philosophical stance and relation between food and life, so food as a sacred experience in the way in which life/living is, can be detected in Slowik's words. He makes his guests aware of the fact that they "ingest" "fat, salt, sugar, protein, bacteria, fungi, various plants and animals and at times entire ecosystems", an image in which humans seem to be predators at best, the last link in the food chain, and parasitic creatures in a gloomier outlook of a hidden misanthropist; Slowik begs them to "taste, savor, relish", "be mindful", "accept" and "forgive" instead of merely eating (*ibidem*). He highlights the utter unimportance of them and of what happens in the room as opposed to the perfect balance of nature, whose grandeur contrasts with their quality of being a "frightened nanosecond" (*ibidem*). Slowik's speech is also practical in the mention of nouns depicting ingredients and of verbs describing actions related to eating, or, rather, types of eating that are more refined. However, the last two verbs in this presentation, along with the way he characterizes human nature transform the tasting into not only a spiritual experience, but also the ultimate spiritual experience, a kind of alpha and omega of all such experiences, as acceptance and forgiveness are among the final accomplishments in the journey of life, usually occurring last in every (traumatic) experience and being the last in one's existence along the road of maturity (both literal and figurative maturity), a sort of apogee that is then unavoidably followed by demise, to make way for a new cycle of life and death. The recommendation to forgive rings the bell of what a person does before dying or when the life cycle of an experience is nearing its end, when the individual accepts, forgives and is forgiven himself/herself. This very speech contains again a hint that this experience is of the ultimate type, that it is not just one in a series, but the absolute one.

The first stage of the tasting is a small *hors d'œuvre*, starter, appetizer or "*amuse bouche*", often showcasing the "artistry and showmanship of the chef" (*Amuse-bouche*, 2023). In this case, it is a "compressed and pickled cucumber melon, milk snow and charred lace" (McKay *et al.*, 2022). The "first course", entitled "The Island", consists of "plants from around the island, placed on rocks from around the shore, covered in barely frozen, filtered seawater which will flavor the dish as it melts", and "scallops" on top; it has bountiful "nutrients", and edible symbols for "soil", "water" and "air"; the accompanying wine is "*premier cru*", a "single row of wines" (*ibidem*). Each course is made a prelude speech by Slowik, meant to create the concept, the story and the thread, trace or connection between the parts of the menu that ultimately make it unitary and contribute to the grand narrative that the menu aspires to mirror. Before the first course, Slowik reminds the guests that the island is a self-sufficient, perfectly

harmonious system that does not need the presence of a human being in it, and people are only a disturbance, as nature is “timeless” as opposed to the unimportant, fleeting, humiliating nanoseconds that people stand for (*ibidem*). This approach is meant to oppose the human being as just an undignified, inadequate and figuratively small predator in comparison with a self-reliant, thriving environment. It can be interpreted as a ruse to determine the guests to appreciate a course that is otherwise a mix of very simple, cheap and ordinary ingredients – fragments of algae and plants, a piece of something resembling an anthill, of a dubious consistence, frozen seawater and just a tiny bit of mollusk on top. However, this ordinariness is taken more than just one step further in the second course, which is a sum of just a few drops of a few liquid or fluid mixes, sitting in tiny round cavities on a big white plate. Slowik introduces it with a discussion of bread having been the food of the poor, “flour”, “water”, and “grain” much more available than “fruits” and “vegetables”, hinting at the Christly offering of bread and wine, reaching the conclusion that, since the guests are not commoners, they will not be offered bread – at a restaurant famous for it – thus teasing them doubly, through this absence on the plate of “unaccompanied accompaniments” along with the meagerness and appearance of the quantities (*ibidem*). The paradox of not receiving something because one is more rather than less, synthesized in the last expression mentioned above that plays on alliteration, the bafflement of expectations and the offensive mockery that can be read in the servings and between the lines of the chef’s tirade, creates tension and frustration. The third dish, “Memory”, evokes for Slowik, as he explains, a particular taco Tuesday night when he, as a child, had to protect his mother from being suffocated to her death with a telephone cord by his drunk father, and thus stabbed the man in his thigh with a kitchen utensil. The result is that the audience is being served a steak with scissors thrust in it, or, more sophisticatedly, “house-smoked Bresse chicken thigh *al pastor*” and “tortillas made with heirloom masa” engraved with relevant scenes from the personal histories of the people seated at every one of the tables, which is a new tailoring of the dish, used for the first time (*ibidem*). The engravings are snapshots of highly unpleasant (in the sense of threatening or embarrassing) moments from the characters’ lives: for the Leibbrandts (a senior couple) they depict scenes from a time when Richard had surgery for melanoma and a dinner he had with his mistress; for Soren, Dave, and Bryce, they show details of their illegal financial transactions; Tyler’s contains his own image with a phone in his hands while he was taking photos of the food earlier in the evening, despite the specific request not to do so coming from the staff. Course number four is called “The Mess”, in which Slowik introduces sous-chef Jeremy as a head chef *manqué*, who blows his brains out on a tarp previously placed on the floor and decorated with small branches of plants especially for the occasion – a stage within a stage, descended into the audience and thus slowly having made the audience a stage-to-be, which is a detail that is still lost on the guests at this time. The white cloth on which the suicide takes place, just like a Japanese *seppuku*, and Jeremy’s short, monosyllabic, barked answers are yet in the minimalist and, ironically-indeed, Japanese style, like the whole performance, as if bitterly illustrating Ted’s words from just a few minutes before. Then comes the fourth course, as written for us viewers of the film on the screen: “pressure cooked vegetables, roasted fillet, potato confit, beef jus, bone marrow”, the highlight and connector with the previous horrific scene being, of course, the bone marrow, the

message of which is rendered more powerfully by the mention “R.I.P. Jeremy Loudon” meant to scatter away permanently, at least for us viewers, any self-delusion that the killing was not real; the post scriptum-like quality of the last reference points, sarcastically, to its seemingly by-the-by, minor-detail nature, which is hair-raising in itself (*ibidem*). The fourth course introduces physical violence and makes the event a horror scenario openly. The violence is so crude that some of the guests still voice loudly their opinion that it must be just make-belief. The “palate cleanser” preceding course six appears described on the screen as well, as “wild bergamot and red clover tea” (*ibidem*), the simultaneously comic and horrifying ironical implication being that the guests and viewers alike are prevented from getting indigestion – literally and figuratively speaking – after the gruesomeness that we have witnessed. It is obvious at this point, and has gradually become so from the very first concrete and metaphorical bites, that the dishes are comments on reality and on the events and characters partaking them. As Slowik comments himself on the tea, it helps as a “soothing balm” when people are faced with “hard home truths”, these truths being the ugliness in their past lives depicted on the tortillas, but also the danger they are in and the frightening prospect of their demises as certain no later than that very night (*ibidem*). Course six is anticipated by an outdoor scene in which *sous-chef* Katherine, formerly sexually harassed by Chef, is allowed to ritually enact her revenge by stabbing Slowik in front of everyone to see, with his consent and encouragement. Then, the men are given the chance to escape and allowed to wander free on the property with a forty-five-second head start and for a limited amount of minutes while they are hunted down, the women being served a sixth course in the meantime – “Man’s Folly”, i.e. “dungeness crab, fermented yogurt whey, dried sea lettuce, umeboshi, kelp” (*ibidem*). Umeboshi is “Japanese pickled plums”, with a very intense salty, sour and pungent taste (Warwick, 2022). The foamy look of the dish, along with its marine taste supplied by the algae in its composition as well as its constituency, of dried plums, can be read as having a symbolical nature, as a subtle comment on male potency or (the prospect of) lack thereof, which is both comical and horrific, given the context of men being pursued outdoors – with the implication of a concrete or figurative threat to their manhood – while women eat this mix on the inside of the very premises, taking a moment to themselves to unwind. Tyler’s demonstration dish, that he is required to make after Slowik reveals that Tyler knew everyone would die when he took Margot with him, results in what is presented on the screen, humorously, as “Tyler’s Bullshit”: “undercooked lamb, inedible shallot-leek butter sauce; utter lack of cohesion” (McKay *et al.*, 2022). The written description for the menu item is humorous because of its informal, colloquial title, which contrasts in terms of both register and interpretative rather than merely descriptive language with what usually appears on fine dining restaurant menus, and because of the contrasts of register that it contains itself in just two lines of discourse, i.e. between the vulgar title and the formality of the comment at the end. Subsequent to his fiasco, he is given the indication to hang himself, which he does, the morale in his case being, besides the public humiliation of acknowledged failure in cooking, i.e. the lack of the validation and approval that he so much craved from the chef, that he is taken away the opportunity and privilege of seeing the finale of the show, which, to him, must be worse than death. As Margot manages to radio for help and a coast guard officer appears (who in reality is Slowik’s man), he initially

plays the role of a potential savior, threatening Slowik with a gun, but his intervention turns out to be part of the performance, of the metaphorical menu, as the pistol is simply a lighter which he uses to light a candle on one of the tables. What is managed with this stunt is play sadistically with the guests' nerves, feelings and expectations (and ours'), directing them through an emotional roller-coaster, throwing them cruelly from the relief of having escaped death into the despair of it all being a hoax. The cheeseburger Slowik cooks for Margot at the end, entitled "Supplemental Course: A Cheeseburger", commented upon "just a well-made cheeseburger" is the final dish and the perfect one, which – the implication goes – requires very few words to describe, as perfection generally does (*ibidem*). The dessert – the "s'more" – is "unethically sourced chocolate and gelatinized sugar water imprisoned by industrial-grade graham cracker", so fine dining made out of something mundane and unhealthy (*ibidem*). The chefs spread broken biscuits, sauce and wine on the floor, adorn every guest with marshmallow corsets and chocolate hats, for the ensemble to be set on fire and explode.

In terms of vocabulary, we predictably notice in the course presentations above the presence of nouns denoting the food ingredients or items, which are either the raw materials that go into the composition of the courses, or the resulting prepared foodstuffs, and nouns denoting elements of nature and the environment, sometimes geographical, since the concept of the menu relies on an allegory with the island as a self-supporting ecosystem, life, nature and evolution. Then, there are adjectives referring to how the ingredients have been made or cooked, therefore involving various techniques or procedures, appearing, in terms of syntactic distribution, before the respective nouns.

Wine-related vocabulary bears on its typical taste descriptions. The flavor of the wine preceding the third course is "Slavonian oak, rich cherry and tobacco notes, and a faint sense of longing and regret", according to the sommelier, where the predictable vocabulary bearing on the wine's notes is followed by an unpredictable description that no longer refers to taste, but to feelings, which creates its own tension, above that coming from all the other phrasings mentioned above so far, because it tells the guests how they should feel instead of allowing them to figure that out by themselves and have a personal response to it. After the sous-chef's killing, Tyler and Margot are served a "biodynamic" wine, with "no added sulfites, a bit of barnyard funk" and a "wonderful match with roasted proteins" (*ibidem*). Proper nouns accompany these characterizations, i.e. those of the wines themselves, like Chassagne-Montrachet, Pinot Noir, Cabernet Franc, those of famous producers, like Caroline Morey, Ross Cobb, who also have come to represent brands, and those of the region of their production, such as "domaine Breton" (*ibidem*). Most of the terms are, unsurprisingly, French.

The presence of phrases from other languages is meant to suggest the cuisine as international, all-encompassing, made by a cultivated, refined, citizen-of-the-world individual who knows no boundaries. The wine is from a first growth, as the French phrase translates, which refers to its class and depicts a very expensive wine amounting to "hundreds of pounds" (Grainger, 2009: 60), pertaining to a very narrow area of production, namely an individual vineyard (*ibidem*: 82), the *grand cru* and *premier cru* being "legally protected and with particular significance in France" (*ibidem*: 84). The steak is "*al pastor*" (Spanish phrase), meaning "shepherd style", referring to both the manner of serving, i.e. in the street and shawarma style, and to the marinating method

for the meat (Al pastor, 2023). However, these phrases also play the role of annoying and provoking, just like everything else. Proof of this is Elsa's reaction when accountability is required from her by one of the three businessmen, who asks her what those images of financial irregularities are, and she deliberately misreads the question, refusing to answer appropriately, breaching Grice's Cooperative Principle in pragmatics and the conversational maxims, by insisting that they are "*tortillas deliciosas*", only to mock, annoy, intimidate and terrorize the inquirer more (McKay *et al.*, 2022). The passage from English to Spanish gives dramatism to the conversation between the no longer successful movie star George Diaz and Felicity, his assistant and mistress who wants to dump him. Spanish generally being a fast-pace language, its employment in a fight gives the sensation of an increased rapidity of developments, of heightened suspense and, again, enhanced pressure and a burdensome situation.

The presentation of each dish on the screen, as in a menu, with a title in capital letters followed by the description of the contents or ingredients helps mark the stages of the experience, which is both the dinner and the movie, showing its development and thus increasing its dramatism and creating tension and suspense. It can also function as a clue to the fact that the participants in the experience are about to be consumed (by the fire, in the end), subsequent to them being adorned so as to represent items in the dessert and thus literally be part of the meal. In this way, they are the experience in a manifold sense – used as props for it, becoming immersed in it, co-creators, makers and addressees, senders and receivers, just as they are part of life and bound to give life to things and then perish themselves. The spatial arrangement of the hall is open architecture, with tables for the small groups or pairs of guests, and the space where the cooking takes place, visible to the invited and placed a bit higher up as if on a stage. The chef descends from this improvised makeshift stage in the audience among the tables. As if in, for instance, stand-up comedy shows that involve the viewers, transforming them in actors and participants, active rather than passive, senders of messages rather than bystanders, the same will happen here until the end, and the end will be the ultimate end, as if only by and in death is the performance of life truly complete, realistic, genuine, and only in this way can art become life and hold equal value. Absolution for sins can be achieved as well only through self-sacrifice.

After the violence breaks loose, Lauden dies and Liebrandt's wedding-ring finger (ironically) gets amputated, and Slowik tells Margot that everyone is going to die, he also asks her which side she decides to be on, i.e. where she is to be "seated", with "those who give or [...] those who take" (*ibidem*). This comment is part of a series in which Slowik intentionally uses the *double entendre*, as his words can be perceived as having a literal meaning, but also a figurative one. In the first-level, literal interpretation, the ones making the food are the givers, and the customers and thus, naturally, the consumers, are the takers; but metaphorically, the makers are also underappreciated craftspeople, artisans, creators, and the others are just destroyers of their work because they are not mindful and respectful in their act of consumption, they do not pay homage to the thing whose eradication they cause. Taking the idea one step further by expressing it in cruder, harsher terms, Slowik says, addressing the Liebrandts, that he is an artist "whose work turns to shit inside your gut" – again, concretely – as raw as the observation may be – and symbolically (*ibidem*). Coming back to the use of double meanings, Slowik does not only perform the move of

extrapolating a concrete meaning to a symbolical one, but also its reverse, making a figurative meaning literal. We witness that in the way in which Doug Verrick, his “angel investor” – a name given to rich people who invest and protect small or risky businesses, especially in their incipient stages – is literally attached a pair of angel wings, held above the ocean with strings and then slowly lowered into the water and drowned, while appearing to be hovering in the night, with the guests watching this whole theatrics through the glass wall of the restaurant; hence, he becomes the “fallen angel” (*ibidem*). The image of the white winged man floating against the night sky is macabre, given its combined silliness and horror (taking into account the predictable outcome). Etymologically, the angel investor was used historically when well-off individuals supported particularly “theatrical productions that would otherwise have had to shut down” (Angel investor, 2023), which is ironic, since Slowik uses a makeshift theatrical performance casting Verrick in it, for which the spectators have indeed paid in their turn. As Slowik is trying to help Margot decide which side she should take, he points out that she should stick with her kind, i.e. that of service providers, implying that they offer something of themselves to be consumed by the others and hinting at her job as an escort. As a general conclusion on the presence of the *double entendre* in discourse, we can say that it mirrors and pairs the one on the plates, in the dishes, where hints are dropped as to the evolution of events and to Slowik’s interpretation of reality and the characters, who are told how they are in his eyes. The makeshift angel, Verrick, would be hilarious if he were not doomed to die, but the cacophonous mix psychologically functions as an enhancer of terror, creating mental and emotional dissonance, in which not only image but also language play a massive role.

To those who pay extra attention to the screen, the master value of language is identified when it provides the key to staying alive. And Margot pays attention to Slowik’s words, which is what takes her out of the experience alive. She acts according to the chef’s principles, manipulating him with them so as to find an escape. To this end, she uses his regret of no longer being able to cook with passion and love, but only mechanically, along with one of his beliefs that he quotes from Martin Luther King – “freedom is never voluntarily given by the oppressor, it must be demanded by the oppressed” – as ingredients to concoct a solution to her own freedom (McKay *et al.*, 2022). In this, she ironically contradicts Slowik’s assessment of her being a taker and an eater, as she proves herself capable of designing a success recipe of her own, both in food terms and in terms of strategy. For starters (pun intended), she takes control and the central position on the symbolical stage of the restaurant by clapping her hands – which is an instance of non-verbal “language” used by Chef more times throughout the dinner to exercise power over his guests and team. Then, she claims she does not like the food and wants to return it, holding the chef responsible for the fact that it lacks joy and love, and, moreover, that she is still hungry; then, as the chef inquires what to prepare for her, unable to breach the etiquette (the way she correctly intuits he wouldn’t have been able to), she orders a burger, indicating that it be a quality one. As part of the intelligent strategy that she applies as a psychological game to have Slowik hooked, she finds logical and valid reasons to support her dissatisfaction as if building a case in court, to make her argument irrefutable, so that the man have no possibility to reject it and dismantle her game. She says food is not supposed to be an “intellectual exercise” instead of something to relax and enjoy, or “obsession” instead of love, and

that even his “hot dishes were cold” (*ibidem*). In order to be convincing, to get his attention by proving he has had hers, which suggests respect, intelligence, willingness to cooperate but also, last but not least, the equal standing that partners have in conversations or the implied partnership and trust that cooks and customers have, she throws back at him the phrase he used previously of this night being one of “hard home truths”; in this, she clearly uses his words against him, especially if we take into account the quote from Luther King as well (*ibidem*). She makes him see that he has failed in his main mission of his life – pleasing the customer – and, moreover, he has “bored” her, which depicts him as lacking skill, purpose and intelligence, shortcomings that she knows would impact him the most, coming from a customer, and given his obvious inflated ego as well. Then, she challenges and dares him, doubting his ability to fulfil her wish, throwing at him the comments “I don’t think you can.” and “Show me.”, targeting the same ego through negative motivation and, through positive motivation, requiring him to satisfy her hunger, as she emphasizes again the fact that she is starving (*ibidem*). With language, she creates an opportunity for herself to make another exit from the show than the one envisaged by its designer; and her words save her life. As he prepares the cheeseburger, and when she tastes it and enjoyment can be read on her face, Slowik is seen smiling. Pursuing her line of logically motivating all her moves, Margot explains, after having shown her appreciation for the burger, and thus having gotten Slowik to a point of concord between them instead of opposition, that “my eyes were a little bigger than my stomach” – something that the chef has generally seen happening before and can agree with as well, which he does loudly, saying that he can understand it – and only then plays her endgame with the line “Can I get the rest to go?” (*ibidem*). Slowik’s perplexity and conundrum are visible on his face, when he realizes that his honor would force him to acquiesce, at the point and in the context where they have gotten in their exchange. Realistically, he lets her go because she has managed to make him cook with pleasure again, and prove that this pleasure is and can be indeed perceived and appreciated by a consumer. She is also the only one he had no bone to pick with in the first place. The reason why the other guests encourage her to leave, and have no trouble accepting that she will be saved whereas they will all die is, besides fellow-feeling, that they appreciate her cleverness, the way in which she has made her escape working the rules of the system created by Slowik and manipulating him at his own game, but also, and perhaps with precedence, that she has managed to make him cook with dedication and find meaning in it again after such a long time.

3. Conclusions

In the beginning, language is used as a marker of sophistication, elitism, meant to impress and convey, along these ideas, that of professionalism and *savoir faire*. It is resorted to in such a manner as to fuel and inflate people’s egos, for them to feel privileged for being part of the culinary experience taking place on Hawthorn Island, which seems to be working on everyone except Margot, which places her in the position of the rational and reasonable every-person who regards the whole affair with suspicion and who manages to have healthy reactions and attitudes when something is indeed wrong around her. Her language is plain, straightforward, assertive, colloquial at times, and the way it contributes to her image of a genuine level-headed individual is yet another function of it at this initial point.

The paper has, on the one hand, looked into the specific vocabulary of the type of gastronomic experience proposed in *The Menu*. In this respect, we have noticed that the vocabulary comprises nouns bearing on the people involved in the business, on food ingredients and foodstuffs, adjectives characterizing these, borrowings coming mainly from French but also from other languages etc. It is also typically and particularly pompous, pretentious and often highly formal. On the other hand, at more advanced levels of interpretation, language manages to juxtapose the comic and the horrific, as well as manipulate on a psychological level. Additionally, we have seen how language artifice can create meaning subtly, like the way food items are selected so as to represent comments on the context and people involved, how double meanings are employed for the same purpose, as well as how the proper and clever use of language can save a person's life. As far as the course explanations appearing on the screen are concerned, they usually contain a descriptive part, where ingredients are mentioned, most of the times with metaphorical adjectival couplings, followed by a comment that is often explanatory as to what is happening in the movie, marking various moments or deeds, highlighting them or ultimately bringing dark humor into the picture. Metaphor and metonymy play an important role in these elevated food descriptions, as they tie the dishes to a concept and manage to be extremely evocative, relying on rich connotations. The most relevant conclusion would remain how wisely-used language can turn the tables on a situation, vanquishing a psychopathic interlocutor into submission, and thus being a life-savior. The protagonist manages to escape because she has paid attention to what has been said and knows how to manipulate her murderous partner-in-dialogue with words.

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THE IMPACT OF COVID-19 ON THE AVIATION SECTOR IN EUROPE. A CASE STUDY OF ROMANIA

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Abstract

Since the declaration of the COVID-19 outbreak as a pandemic in March 2020, aviation has been one of the industries hardest hit by the Coronavirus crisis, as most of the countries closed their borders and suspended international air travel. This disruption, greatest in the history of aviation, called for innovative ideas to recover and to exceed pre-pandemic levels. This paper discusses the economic impact of the COVID-19 pandemic on the aviation industry. The purpose of the study is firstly to analyze the impact of the Coronavirus on the global aviation industry and then, shift to a more focused perspective on Europe, more specifically on Romania. The data collected ranges from January 2019 to June 2022 from official databases such as IATA, OECD, ATAG, AIC and many more. A study was also conducted online, to a sample of 132 respondents from Romania, in order to understand the travel patterns after the travel restrictions have been lifted. The survey showed that there is a strong interest for international travel, and that there are multiple aspects that the aviation industry should take into consideration for a sustained recovery, based on the preferences of the consumers. At the same time, based on the findings, the paper also provides estimations in terms of the future of the aviation industry at regional level, and suggestions that economic actors could put in practice on their path towards recovery.

Keywords: *aviation industry, COVID-19, crisis, economic impact, revenue loss, Europe, Romania*

JEL Classification: Z21.

Introduction

Aviation stands at the heart of economic development. As aviation provides the only means of transportation that connects different points on the map at a worldwide level, it is indispensable for global businesses and tourism, facilitating the economic growth and development in both developing and developed countries, enabling world trade, increasing revenues, creating jobs and better standards of living.

In a “normal world”, it played a very important role. It supported over 87 million jobs worldwide, out of which over 11 million were direct, had an economic impact of \$3.5 trillion and supported 4.1% of the global GDP. According to ATAG, “if aviation were a country, it would rank 17th in size by GDP (similar to Indonesia or the Netherlands)”.

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And, as an industry with such importance for human connectivity, it is also one of the most fragile to different shocks. Since the start of the third millennium, aviation and the airline industry have had a turbulent history, with economic, political, or natural shocks such as the 2002-2004 outbreak of SARS, the Great Recession in 2007-2009, the eruption of Eyjafjallajökull in 2010, COVID-19 since 2020 and the war in Ukraine since the spring of 2022. The factors of disruption are not only external, as its volatility extends to internal factors: industry transformations changing the rules and functioning of aviation, privatization of key industry actors, airline deregulation (especially in the United States and Europe), competition (particularly from the low-cost carriers).

However, the industry had never experienced something like COVID-19 before, until the spring of 2020. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. From that moment onward, the aviation industry has remained one of the hardest hit industries; IATA reported that “by the first week of April, governments in 75% of the markets tracked by IATA completely banned entry, while an additional 19% had limited travel restrictions or compulsory quarantine requirements for international arrivals”.

Besides most of the world countries having closed their borders and suspended the international air travel, the industry was strongly impacted by social distancing, confinement measures and the globally shrinking economic activity. A severe financial disruption in this industry was caused by the 80% global drop in flights in April 2020.

Once the crisis started, it was obvious that it would be without precedent and that there would be a need for the industry to go into survival mode, which was difficult to manage, considering the loss of traffic and revenues. Thus, what has become of the aviation industry? More importantly, what will become of it in the near future? At what stage is the Romanian civil aviation in the present and what are the future prospects for it? These are questions we will have answers for in the study that follows.

Literature Review

Aviation, an industry booming during good times and busting during bad, is one of the most vulnerable sectors to negative events and is forced to be innovative and creative in terms of crisis management, in order to help the tourism industry to survive.

The most frightening news for tourists and tourism businesses are epidemics and pandemics (Uğur and Akbiyik, 2020). When it comes to travel, it is not only travelers who are at risk, but also other people, like staff and locals that they get in contact with during the journey. It is indeed that many factors contribute to the spread of infectious diseases, but the most significant one is the crossborder movement of people (Wilson, 1995; McNeill, 1998).

In the transfer of epidemics or pandemics between locations, passengers play one of the most serious roles (Hollingsworth et al., 2006; Institute of Medicine, 2010), and the most significant contemporary means to spread diseases, specifically COVID-19, is aviation (Zang et al., 2020). The movement of humans is known for having had implications in the spread of diseases such as influenza, MERS (Middle East Respiratory Syndrome), SARS (Severe Acute Respiratory Syndrome), drug-resistant malaria, and many more.

Throughout history, humankind has been threatened by various infectious diseases. If centuries ago, maladies could spread only “as far as people could walk,

[...] horses could gallop and ships could sail” (Tatem et al, 2006), the latest air transport development and affordability and the global air network connections have made it very easy for infectious diseases, such as the avian flu, cholera, Ebola, malaria, and coronaviruses, to spread easily and even become real pandemics. The spread of diseases in such an interconnected world affects customer behavior and travel patterns, leading to enormous economic losses.

The SARS epidemic in 2003 is a good starting point, as both it and COVID-19 have the same trigger, coronavirus, both started in East Asia and belong to the same era, thus they are comparable in terms of protection measures and economic impacts. Multiple studies have been carried out on the macroeconomic effects that the SARS epidemic had in 2003 and what was noticeable was that there were large reductions in the consumption of various goods and services and high increases in business-operating costs. According to Wilder-Smith (2003), the air travel was strongly impacted by the SARS epidemic, especially in China; the overall effects are said to have been four or five times bigger than those of 9/11. Results show that, overall, in 2003, the business and leisure travel were strongly impacted by the loss of confidence and a strong feeling of fear in terms of the global spread, which resulted in Asia-Pacific airlines losing 8% of annual RPKs and \$6 billion in revenue.

However, assessing the scale of SARS-COV-1 and SARS-COV-2, the latter is the worst pandemic that affected tourism, aviation and affiliated sectors and industries, as in just a couple of months it changed the global tourism system from over-tourism to non-tourism (Gössling S., 2020). It is also the third serious outbreak caused by a coronavirus (Wang et al., 2020).

The imposed travel bans meant to prevent the spread of the virus immediately affected the aviation industry, as international travel and domestic tourism were close to impossible. Massive reductions in passenger numbers caused the cancellation of multiple flights or empty flights between airports, reducing revenues for airlines and forcing many actors to lay off their employees or even declare bankruptcy.

From the start of the pandemic, specialists figured out pessimistic scenarios, based on the fast spread of the virus outside China and the potential worldwide economic impact (McKibbin and Fernando, 2020). These pessimistic scenarios were supported later on by statements made in the first part of 2020 by Airbus' Guillaume Faury, EasyJet's Johan Lundgren, United Airlines' Oscar Munoz, Qantas' Alan Joyce, that the COVID-19 pandemic is the worst crisis that ever hit the aviation industry.

The economic impact of COVID-19, especially on the aviation industry, has been of interest to many specialists, and there are multiple studies which have been released on the subject, most notable among others being: Xue et al. (2021), Serrano F. and Kazda A. (2020) and Sun et al. (2021), however, there is still a need for studies focused on specific regions or countries, such as Romania.

Research Methodology

An online literature research was carried out using Google Scholar, JSTOR, Science Direct, MDPI, Hunt Library and official databases such as IATA, OECD, ATAG, AIC and others, in order for official information on the economic impact of the coronavirus outbreak on the aviation industry to be collected. The online search engines were used to collect and analyze data from reliable sources such as research

publications, industry reports, official websites, and news articles and the search was limited to works that were published between January 2019 and June 2022.

Quantitative research was conducted on Romanian citizens to compare the usage of air transportation for domestic and international travel, their choice of carriers and the purpose of travel, but more importantly, their will to travel during times of pandemic. As we have seen, the unexpected outbreak of coronavirus was and still is a challenge for all stakeholders in the aviation industry. The magnitude of the economic loss is enormous, scale that the industry has not come across before. The research questions that guide this study are “To what extent did the coronavirus pandemic affect the aviation industry in Romania?” and “What is the recovery path for the airline industry at regional level?”.

COVID-19 and Aviation

In 2019, the aviation industry had very good prospects for the future. There were 4.5 billion carried passengers, 46.8 million scheduled commercial flights, 8.68 trillion passenger kilometers and 58% of the passengers travelling by air. Every day, the aviation industry registered on average 12.5 million passengers, 128,000 flights and \$18 billion worth of carried goods. It was one of the most prolific industries until the pandemic struck the world. Forecasts have shown that by year 2038 it was expected for the industry to see over 8 billion passengers, support 143 million jobs and contribute \$6.3 trillion in economic activity.

But the second decade of the 3rd millennium began with multiple countries of the world closing their borders as a response to the start of the COVID-19 pandemic. The coronavirus disease, also known as COVID-19, is an infectious disease caused by a coronavirus, SARS-CoV-2, which emerged in Wuhan, China, in December 2019. In March 2020, deeply concerned by the alarming levels of spread and severity, the World Health Organization declared it as a pandemic. And so, most of the countries imposed either partial or complete border closures for foreign nationals. At that time, more than 90% of the world’s population were living in countries that imposed restrictions for the entry of non-citizens and non-residents, namely tourists, business travelers and new immigrants, and almost 40% were living in countries with borders completely closed. Due to the rapid drop in the travel demand as a consequence of the coronavirus spread and travel measures that followed, air carriers reduced their number of international flights. Moreover, airlines tried to fly as much as possible directly between cities, avoiding performing any connections through hubs. As a result, cities who were never directly connected before, started benefitting from non-stop services.

At the peak of the near total shutdown in mid-April of 2020, the number of flights that operated globally was only 23.5% (46,000) of the total of almost 197,000 registered just eight weeks earlier. The combination of travel restrictions, emerging economic crisis, and the change in the behavior of passengers caused an extreme drop in the demand for airline services. Passenger demand, measured in revenue passenger kilometers, was down by 94.3% compared to April 2019, a rate of decline with unknown precedent in the history of aviation.

In September 2020, an estimation done by ATAG, a global association that represents all sectors of the aviation industry, showed that the pandemic will result in

the loss of 46 million aviation-supported jobs, meaning 52.5%, and in the reduction of \$1.8 trillion in economic activity supported by aviation, meaning 51.5%.

The pandemic pushed the aviation industry into survival mode in 2020. Since revenues were down from \$838 billion in 2019 to only \$328 billion in 2020, air carriers had to cut costs from \$795 billion in 2019 to \$430 billion in 2020. In order to cope with the economic collapse, many aviation actors had no other choice than to cut jobs. For example, EasyJet cut one-third of its 15,000 employees, Boeing announced it will eliminate about 13,000 jobs worldwide, while Airbus planned to cut 15,000 jobs, out of which 1,700 only in the United Kingdom.

There were also companies that took less drastic measures and only suspended their employees or let them take unpaid or partially paid leave, to keep their jobs. About 36,000 British Airways employees were suspended and put under governmental job-retention scheme, 40,000 Delta Air Lines employees took unpaid leave, while 39,000 American Airlines employees took partially paid leave or early retirement. However, at the same time, American Airlines planned to cut its 17,000 management and support staff by 30%.

Important part of the aviation industry, the airport sector was expected to generate prior to the COVID-19 outbreak almost \$200 billion in 2020. However, the unprecedented impact of the pandemic reduced the airport revenues to \$125 billion in 2020, meaning a reduction of 66.3% compared to the projected baseline. The impact of the pandemic on the airport sector continued in 2021 and it was expected that there was a loss of over \$94 billion by the end of the year.

Despite this economic impact, the role of aviation, specifically the air cargo transportation, has been highlighted during the COVID-19 shutdown, when airlines provided over 46,000 special cargo flights that transported over 1.5 million tons of medical supplies and protective equipment. Moreover, without aviation, almost 12 billion vaccines would not have been delivered all over the world. In 2020, the air cargo sector generated almost \$130 billion, representing a third of airlines' overall revenues and an increase of 10 to 15% compared to pre-crises levels. In 2021, cargo demand was 8% higher than in 2020, generating \$155 billion, and is expected to be 13% higher in 2022.

Moreover, regardless of all the devastation that the coronavirus pandemic has brought to the aviation sector, there are multiple signs of recovery. One of them would be that over 1,400 new air routes were scheduled to operate in 2021. This is driven by the most affected regions – Europe (over 600) and Asia-Pacific (over 500). China alone has seen 200 new routes added, while the United States had 235 new routes.

For some others, in order to manage the financial impact that struck them, they had to lay off significant numbers of employees, especially the ones related to the operations of aircrafts, namely pilots and crews. Pre-Covid, there was a pilot surplus in Europe, which was shown by the airlines themselves. For example, by the end of 2018, Aer Lingus was receiving about 3,000 applications from experienced pilots for 100 open positions. Once the COVID-19 hit the world, thousands of aircrews were left unemployed. By January 2021, over 18,000 pilot jobs were either threatened or permanently lost, with Norwegian being at the top.

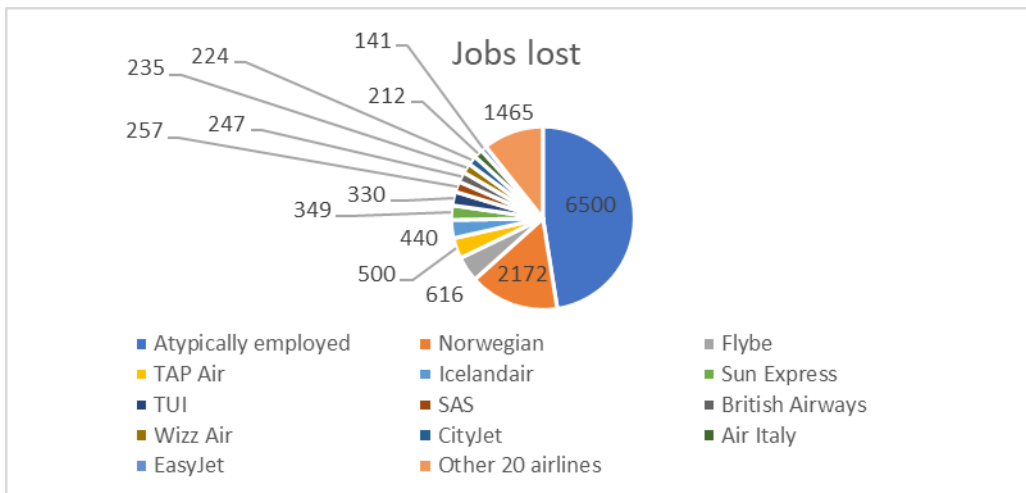


Figure 1. Pilot jobs lost by January 2021 across Europe

Some airlines even resorted to quite unscrupulous or abusive methods in order to survive.

While in 2020, Lufthansa advised student pilots that no new pilots will be needed for a long time, so they should consider other career paths, in 2021, strongly impacted by the pandemic, the company considered taking a unilateral action on the contracts with their students within the Lufthansa Aviation Training. The change implied outsourcing the training to other schools, although the students had already paid €80,000 for the LAT quality and withdrawing the promise of direct employability of the students at Lufthansa after finishing the training.

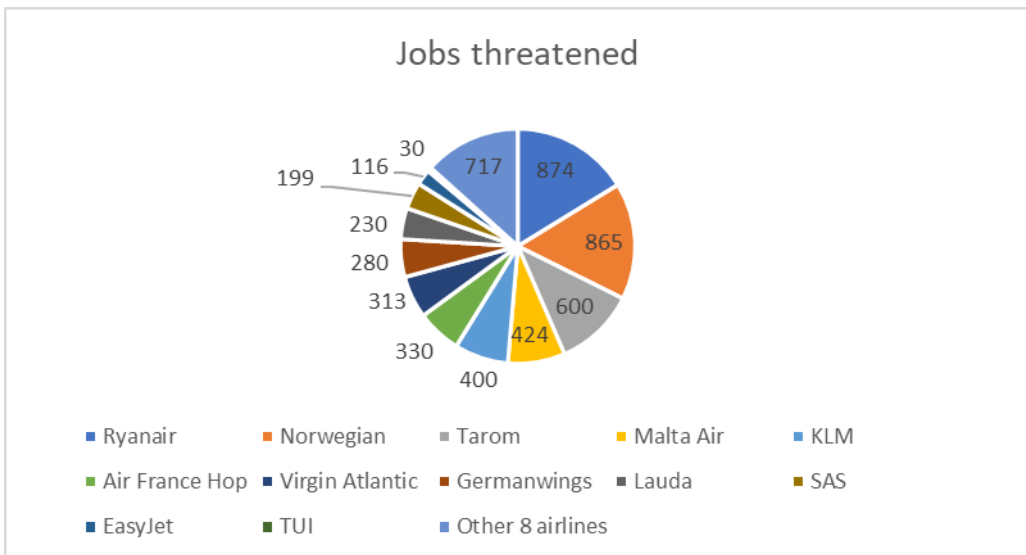


Figure 2. Pilot jobs threatened by January 2021 across Europe

Wizz Air was also exposed for anti-worker practices. Through a recording of a management meeting which was leaked, it could be observed that the company was using the pandemic as an opportunity to clean up their aircrews, aiming to dismiss 250 pilots, stop the training for 150 and put on the list another 100. Besides the choices made based on likes and dislikes, on the effort made for the company such as working on days off, the managers also look at the employee costs, calling the ones employed indirectly through agencies “cheap” and “easy to manage”, and easy to lay off at any point in time.

Ryanair, not wanting to be outdone, implemented Pay-to-fly schemes, to encourage people to enroll in their training programs for €6,000, aiming to use these fresh graduates for the few flights they had during the pandemic, while their employees sat at home on government support.

SmartLynx, a charter company from Latvia, also implemented Pay-to-fly schemes, for experienced pilots who were not flying due to the pandemic, requiring them to pay €1,000 for sim training and license proficiency check, promising them to be on a list for “first choice for standby crew” in exchange, without a certainty that they would be called for flights.

Luckily for the European aviation, there is still a surplus of pilots, on some aircraft types, but the demand is rising quite quickly, specialists expecting that by 2023, there will be a pilot shortage of over 2,000 pilots, reaching almost 4,000 by 2029.

It was not only the airlines facing financial struggles, but airports alike. In October 2020, the Airports Council International estimated that almost 200 European airports, responsible for 277 thousand jobs and €12.4 billion of European GDP, were facing insolvency, leading to mass layoffs or redundancy. Closure of these airports would have posed a significant impact on the air transport system, but many stayed open for cargo operations, which brought some economic relief.

Economic recovery, led by the European aviation sector

Europe is the top destination for tourists all over the world, with five out of the top ten visited destinations in the world being located here, accounting for 50% of global tourist arrivals. Here, tourism and aviation play an important role within the grand business ecosystem that the European Union is, contributing to prosperity and bringing economic advantages such as creating jobs.

After having a steady increase for 10 years, in 2019, the number of international tourist arrivals was almost 747 million, which in 2020 decreased to 237 million. In 2020, the highest volume of inbound travelers belonged to France, which topped also the ranking in terms of number of international tourist arrivals at global level, followed by Italy, Spain and Turkey.

In 2021, numbers were similar, Europe receiving a bit over 280 million international tourists, with only a 19% annual increase. Still, it was the region with the most international arrivals.

Number of international passengers by region (2019-2020-2021, based on from/to State)

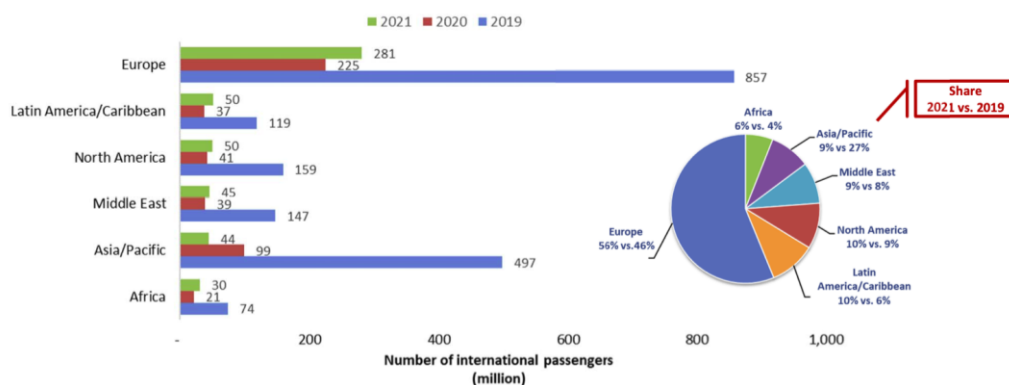


Figure 3. Number of international 2019 to 2021, by region in millions (Source: ICAO)

When we talk about recovery, one impactful event we can think of is 9/11. Thinking about what the airline industry went through to recover and what fixes were needed, it was clear: more secure cockpit doors, stricter airport screening, a more careful examination of potentially dangerous passengers. But it is not so clear what will happen on the long term after this pandemic.

While in 2020 it was impossible to make optimistic forecasts for 2021, the latter brought recovery to the European aviation. Although the recovery was partial, it was sustained, as the traffic was at -64% from 2019 levels at the start of the year and increased to -22% by the end of 2021. Still, there was a huge financial impact for the European aviation actors: €18.5 billion net losses for airlines, with 1.4 billion passengers less than in 2019 and almost 5 million flights less. Governments had no choice but to provide billions of euros to the industry, in order to rescue airlines from bankruptcy, airports from insolvency and, subsequently, protect jobs. In the European Union, state aid has always been an important subject in the airline industry, and it is even more important in times of crisis.

Toward recovery, state financial aid has had a strong impact without which many companies would not have survived, with the largest European economic powers (Germany, France) and some Northern European countries supporting their national carriers more extensively. Within a year from when the air traffic was virtually zero, by the end of April 2021, more than 30 schemes were approved by the European Commission, either as remedy for grave economic disturbances or as compensation for damage caused by exceptional situations:

| <i>Airline</i> | Country | Amount (million €) |
|--------------------------------|------------------|---------------------------|
| <i>Air France</i> | France | 11,000 |
| <i>Lufthansa</i> | Germany | 6,000 |
| <i>KLM</i> | Netherlands | 3,400 |
| <i>SAS</i> | Denmark - Sweden | 1,274 |
| <i>Finnair</i> | Finland | 1,176 |
| <i>LOT Polish</i> | Poland | 650 |
| <i>Swedish carriers</i> | Sweden | 455 |
| <i>TAP Portugal</i> | Portugal | 452 |
| <i>Brussels Airlines</i> | Belgium | 290 |
| <i>Air Baltic</i> | Latvia | 250 |
| <i>French carriers</i> | France | 200 |
| <i>Alitalia</i> | Italy | 297 |
| <i>Austrian Airlines</i> | Austria | 150 |
| <i>Italian carriers</i> | Italy | 130 |
| <i>Aegean Airlines</i> | Greece | 120 |
| <i>Blue Air</i> | Romania | 63 |
| <i>Corsair</i> | France | 30,2 |
| <i>Nordica</i> | Estonia | 30 |
| <i>Various enterprises</i> | Hungary | 21.76 |
| <i>All interested airlines</i> | Denmark | 20 |
| <i>TAROM</i> | Romania | 19.3 |
| <i>SATA Air Azores</i> | Portugal | 12 |
| <i>Croatia Airlines</i> | Croatia | 11.7 |
| <i>All interested airlines</i> | Cyprus | 6.3 |
| <i>Danish carriers</i> | Denmark | 6 |
| <i>All interested airlines</i> | Slovenia | 5 |

Table 1. State aid to airlines (up to April 2021)

The biggest European aviation actors still had significant losses in flights, and among these we can mention: easyJet with -64% flights, Lufthansa, -61%, Ryanair, -43%, Air France - KLM, -44%, and Turkish Airlines -30%.

When measures like lockdown started being lifted in the spring of 2021, airlines started preparing for the influx of passengers that were expected for the summer, especially that approaching the summer season, it could be observed a rise in the vaccination rates, at least in some regions. Despite this, airlines were taken aback once again by the Delta variant of COVID-19.

Towards the end of 2021, airline companies were once again determined to make profits out of festive holidays, ski vacations, family visits domestically or abroad, but then the Omicron variant struck. This time, however, while initially there were fears that pushed some countries to reinstate restrictions on travel, such as mandatory

quarantine, testing and vaccination, or some others to completely ban entry (such as the Netherlands or France banning the entry of UK citizens to avoid the spread of the new variant), Omicron has proven itself milder than previous versions, regardless of its fast spread. And thus, the prospects for the Summer of 2022 are promising, especially with latest reports showing that in March 2022, the traffic measured in revenue passenger kilometers was up 76% compared to a year ago, 41% below 2019 levels.

Romania's aviation – a blooming sector

In recent years, aviation has seen one of the most dynamic economic developments in Romania. Low-cost carriers have been the stimulus of this growth, as they opened new horizons for Romania's air transportation.

Compared to other countries in Eastern Europe, Romania has a well-developed airport infrastructure. There are 16 commercial airports in service today, most of them used for international traffic, the most important being Henri Coanda International Airport (OTP).

When the coronavirus pandemic struck, the Romanian aviation market was going through a spectacular development. If a decade ago, the number of passengers that Central and Eastern European airports such as the Budapest Airport or Boryspil International Airport were surreal for an airport like Otopeni, today, the numbers are relatively comparable, as shown in the table below.

| Airport name | No. of passengers (millions) | | | | |
|---|------------------------------|-------|------|------|--------------------|
| | 2010 | 2019 | 2020 | 2021 | 2022 (expected) |
| Bucharest Henri Coanda International Airport | 4.92 | 14.7 | 4.45 | 6.92 | 10 |
| Budapest Ferenc Liszt International Airport | 8.19 | 16.17 | 3.86 | 4.62 | 13.2 |
| Boryspil International Airport | 6.7 | 15.26 | 5.16 | 9.43 | 13.1 |
| Warsaw Chopin Airport | 8.71 | 18.86 | 5.48 | 7.47 | - |

Table 2. Comparison of East and Central European airports

However, in 2019 the airport in Otopeni was already at its limit in terms of terminal capacity, but with an expansion project under appraisal since March 2018. According to the European Investment Bank, the project provides the airport with higher capacity, better operational resilience and passenger services, but also improved aviation safety and security. Forecasting gradual raises in the number of passengers, in February 2021, Bucharest Airport announced investments of over €970 million meant to double the capacity, by creating a second terminal within the next 5 years.

The major contribution of the air transport sector in Romania could be seen through multiple aspects. In a report published by ATAG in September 2020, Romania is shown as “middle-class” when it comes to tourism competitiveness. With 7 commercial airlines based here, 13 commercial airports and 5.9% contribution of tourism to the GDP, meaning \$4.2 billion, Romania occupied the 56th place worldwide in 2019. In terms of jobs created, Romania is comparable to countries such as Norway, Belgium, and surpassed by far Austria, Czech Republic, Denmark and Hungary:

| Country | Direct Jobs | Indirect Jobs | Induced Jobs | Total |
|-----------------------|--------------------|----------------------|---------------------|--------------|
| <i>Spain</i> | 251000 | 182000 | 133000 | 1300000 |
| <i>Russia</i> | 301000 | 666000 | 388000 | 268000 |
| <i>Turkey</i> | 154000 | 143000 | 69000 | 1100000 |
| <i>United Kingdom</i> | 336000 | 300000 | 280000 | 465000 |
| <i>Germany</i> | 322000 | 311000 | 173000 | 314000 |
| <i>France</i> | 342000 | 313000 | 192000 | 269000 |
| <i>Italy</i> | 200000 | 169000 | 82000 | 292000 |
| <i>Greece</i> | 48000 | 41000 | 23000 | 363000 |
| <i>Netherlands</i> | 96000 | 51000 | 28000 | 158000 |
| <i>Portugal</i> | 52000 | 55000 | 35000 | 190000 |
| <i>Switzerland</i> | 71000 | 88000 | 39000 | 44000 |
| <i>Sweden</i> | 46000 | 28000 | 19000 | 76000 |
| <i>Poland</i> | 48000 | 59000 | 28000 | 30000 |
| <i>Ireland</i> | 40000 | 14000 | 12000 | 83000 |
| <i>Ukraine</i> | 24000 | 31000 | 52000 | 37000 |
| <i>Romania</i> | 30000 | 35000 | 21000 | 53000 |
| <i>Norway</i> | 40000 | 29000 | 22000 | 42000 |
| <i>Belgium</i> | 43000 | 23000 | 13000 | 23000 |
| <i>Finland</i> | 23000 | 19000 | 15000 | 22000 |
| <i>Austria</i> | 34000 | 16000 | 11000 | 15000 |
| <i>Hungary</i> | 16000 | 17000 | 11000 | 29000 |
| <i>Denmark</i> | 32000 | 15000 | 10000 | 11000 |
| <i>Czechia</i> | 27000 | 21000 | 8000 | 11000 |
| <i>Cyprus</i> | 7000 | 4000 | 4000 | 43000 |
| <i>Iceland</i> | 13000 | 9000 | 5000 | 28000 |
| <i>Malta</i> | 4000 | 3000 | 4000 | 44000 |
| <i>Croatia</i> | 10000 | 3000 | 3000 | 20000 |
| <i>Luxembourg</i> | 6000 | 1000 | 1000 | 9000 |
| <i>Slovenia</i> | 2000 | 1000 | 1000 | 13000 |

Table 3. Number of jobs supported by aviation within Europe by country

By analyzing the number of passengers that the most significant Romanian airports had in 2021, compared to 2020 and 2019, as reported by the Romanian Civil Aeronautical Authority, and calculating the change, it can be observed that the traffic within the country recovered less than half, being almost 52% below the 2019 levels. The only two airports that exceeded pre-pandemic levels were Oradea International Airport and Baia Mare Airport, by 43% and almost 8% respectively. With over 7 million carried passengers in 2020, out of the 2.7 billion in the whole European Union, Romania was around the middle of EU-27 ranking. According to EUROSTAT,

most of the passengers were international intra-EU, over 4.1 million, almost 2.1 million were international extra-EU and only 436 thousand were national.

Results

The questions which stood at the base of this study were “To what extent did the Coronavirus pandemic affect the aviation industry in Romania?” and “What is the recovery path for the airline industry at regional level?”. In order to provide a clear forecast and suggestions for the future of the aviation sector in Romania, a study has been conducted on Romanian citizens who have or have not travelled by air, domestically and/or internationally since the restrictions have been lifted and the state of alert has been implemented (14th of May 2020). The survey was shared via social media, through Facebook and WhatsApp, in groups being made out of people with certain travel patterns before the COVID-19 pandemic.

The online survey, conducted in June 2022, had a sample of 132 respondents from Romania, from different age groups, backgrounds, with different net incomes and travel purposes, and the sample characteristics were as follows.

| Characteristic | % | |
|------------------------------------|-------------------------|------|
| Air travel since 14/05/2020 | Yes | 56.0 |
| | No | 44.0 |
| Gender | Female | 60.0 |
| | Male | 39.0 |
| | Prefer not to say | 1.0 |
| Age group | 18 - 25 | 20.0 |
| | 26 - 35 | 18.0 |
| | 36 - 45 | 21.0 |
| | 46 - 55 | 24.0 |
| | 56 - 65 | 9.0 |
| | Above 65 | 8.0 |
| Net income (RON) | Under 1500 | 5.0 |
| | 1501 - 3000 | 25.0 |
| | 3001 - 4500 | 28.0 |
| | Above 4500 | 35.0 |
| | No income yet | 7.0 |
| Occupation | Student | 16.0 |
| | Full-time employee | 59.0 |
| | Part-time employee | 4.0 |
| | Freelancer | 6.0 |
| | Unemployed | 1.0 |
| | Retired | 14.0 |
| Level of studies | Secondary (high school) | 16.0 |
| | Post-secondary | 11.0 |
| | Bachelor's degree | 43.0 |
| | Master's degree | 22.0 |
| | Doctoral degree | 8.0 |

Table 4. Characteristics of the 132 respondents

The question that opened the study was “Since the travel restrictions have been lifted, have you traveled by plane?”, for which 56% of the respondents answered with “Yes”, while the remaining 44% responded with “No”. From here, depending on the answer, the survey was then split in half.

Almost half of the respondents have been unwilling to travel

For the ones that answered “No”, the questionnaire would then continue with an evaluation of factors that influenced their decision not to use air transportation.

Breaking down the results of the group that did not travel, out of the 58 respondents, we can see that most respondents belonged to Generation X and Generation Z, and half were full-time employees and almost a quarter were retired. Most of them had monthly incomes between 1501 and 3000 or between 3001 and 4500 RON net, and half had a bachelor’s degree.

| Characteristic | | % |
|-------------------------|-------------------------|------|
| Gender | Female | 55.0 |
| | Male | 43.0 |
| | Prefer not to say | 2.0 |
| Age group | 18 - 25 | 19.0 |
| | 26 - 35 | 15.0 |
| | 36 - 45 | 12.0 |
| | 46 - 55 | 26.0 |
| | 56 - 65 | 16.0 |
| | Above 65 | 12.0 |
| Net income (RON) | Under 1500 | 10.0 |
| | 1501 - 3000 | 36.0 |
| | 3001 - 4500 | 36.0 |
| | Above 4500 | 9.0 |
| | No income yet | 9.0 |
| Occupation | Student | 19.0 |
| | Full-time employee | 50.0 |
| | Part-time employee | 5.0 |
| | Freelancer | 2.0 |
| | Unemployed | 0.0 |
| | Retired | 24.0 |
| Level of studies | Secondary (high school) | 19.0 |
| | Post-secondary | 16.0 |
| | Bachelor’s degree | 50.0 |
| | Master’s degree | 14.0 |
| | Doctoral degree | 1.0 |

Table 5. Characteristics of the 58 respondents who have not travelled since 14/05/2020

The reasons that were evaluated were: the price of the ticket, the measures against COVID-19 (the obligation of wearing a mask), the fear of being infected with COVID-19, the inexistence of direct flights to the desired destination. Respondents had to choose from 1 to 5 how much they were influenced by each factor, ranging from 1 “Not at all” to 5 “Very much”.

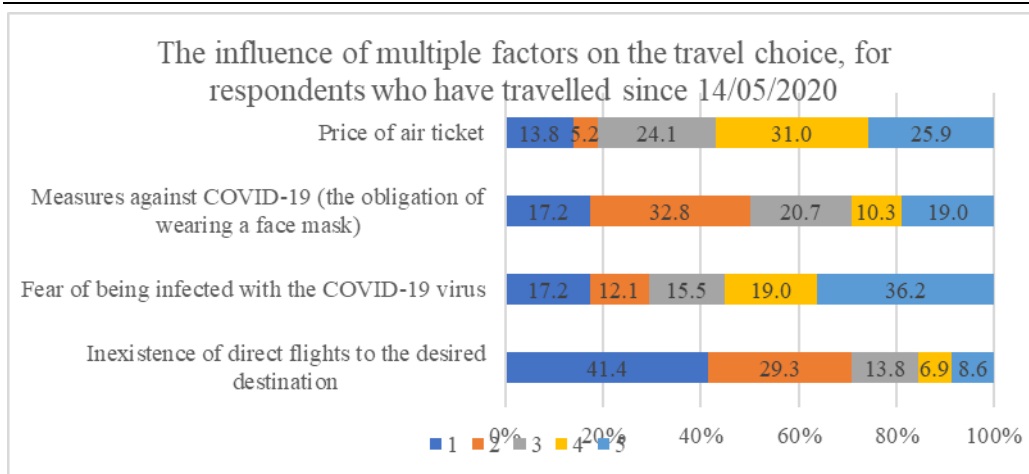


Figure 4. Influence of different factors on the choice not to travel

In the form, the evaluation was done on a five-point scale, 1 being “Not at all”, 2 being “Very little”, 3 being “Little”, 4 being “Much” and 5 being “Very much”. Thus, analyzing the data, we can see that the price of the ticket weighted the most, but also the fear of being infected with COVID-19, the percentage of answers above 4 was almost 57% for the former and 55% for the latter. The travel decision of 29% of the respondents was also quite affected by the measures against COVID-19, such as the obligation of wearing a mask.

Thirst for (international) travel

The other 74 respondents travelled after the restrictions have been lifted. By analyzing the choices in terms of age, gender, income, occupation, and level of studies, we can see that the most part of respondents belonged to Generation Y (known as the Millennials), Generation X, but also Z and were full-time employees or students. Over half had monthly incomes above 4500 RON net, followed by almost a quarter with incomes between 3001 and 4500 RON. Moreover, most of them had either a bachelor’s or a master’s degree.

| Characteristic | | % |
|-------------------------|-------------------|------|
| Gender | Female | 64.0 |
| | Male | 36.0 |
| | Prefer not to say | 0 |
| Age group | 18 - 25 | 20.0 |
| | 26 - 35 | 20.0 |
| | 36 - 45 | 27.0 |
| | 46 - 55 | 23.0 |
| | 56 - 65 | 4.0 |
| | Above 65 | 6.0 |
| Net income (RON) | Under 1500 | 0 |
| | 1501 - 3000 | 16.0 |
| | 3001 - 4500 | 22.0 |
| | Above 4500 | 55.0 |

| | | |
|-------------------------|-------------------------|------|
| | No income yet | 7.0 |
| Occupation | Student | 14.0 |
| | Full-time employee | 66.0 |
| | Part-time employee | 3.0 |
| | Freelancer | 9.0 |
| | Unemployed | 1.0 |
| | Retired | 7.0 |
| Level of studies | Secondary (high school) | 13.0 |
| | Post-secondary | 8.0 |
| | Bachelor’s degree | 38.0 |
| | Master’s degree | 28.0 |
| | Doctoral degree | 12.0 |

Table 6. Characteristics of the 74 respondents who have travelled since 14/05/2020

For the ones that answered “Yes”, the survey would go on to develop a deeper understanding of how many times the respondents travelled domestically and/or internationally, what was their choice in terms of air carriers, what influenced their decision of travel.

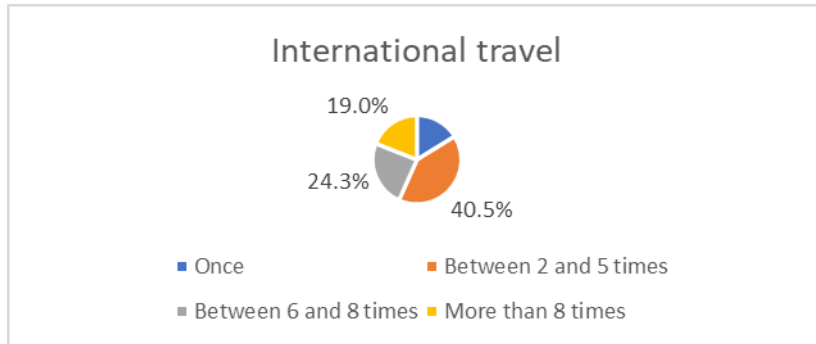


Figure 5. Times travelled internationally since 14/05/2020

When asked if they have travelled internationally since the lift of the restrictions, over 40% of the respondents answered that they have travelled between 2 and 5 times, being followed by 24% who have travelled between 6 and 8 times and 19% who travelled more than 8 times. This shows that the will to travel was quite high and it was interesting to see also the reason behind the frequency.

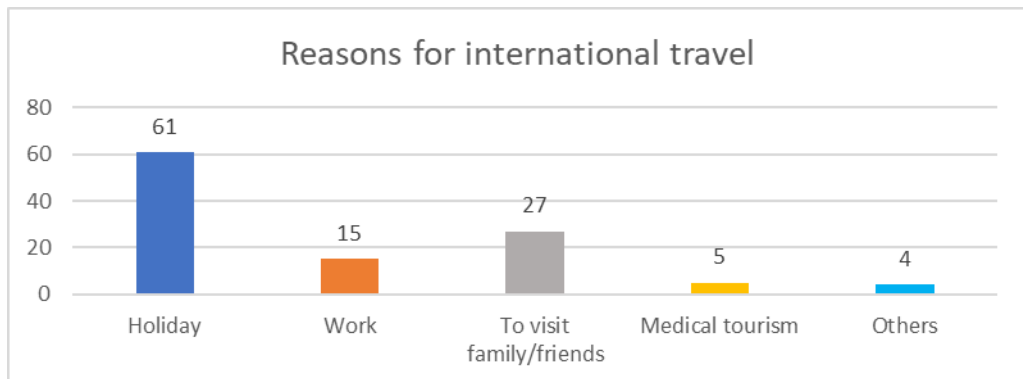


Figure 6. Reasons for international travel since 14/05/2020

The respondents had to choose their reasons for international travel, but the question allowed for multiple choice and even provided the chance for respondents to give their own reason for the international travel. Most of the time, air transportation was used for holiday, which was chosen 61 times, and then 27 to visit family and/or friends outside the country. The 4 respondents that chose “others” provided answers such as “Erasmus/study abroad”, “university studies” and “volunteering”. Respondents were also asked to provide which air carriers they have used for their travel, and we can observe a strong preference for ultra-low-cost carriers, with Wizz Air occupying the first place (52 answers), followed by Blue Air and Ryanair, with 34 and 31 answers respectively. On the domestic side, we can see that the market is not as evolved as we can see in other parts of the world. When asked how many times respondents have travelled domestically since the restrictions were lifted, the percentage was quite low. Only 23% of the 78 respondents travelled by air at least once domestically, mainly for work purposes, but also for medical tourism, as we can see in the chart below.

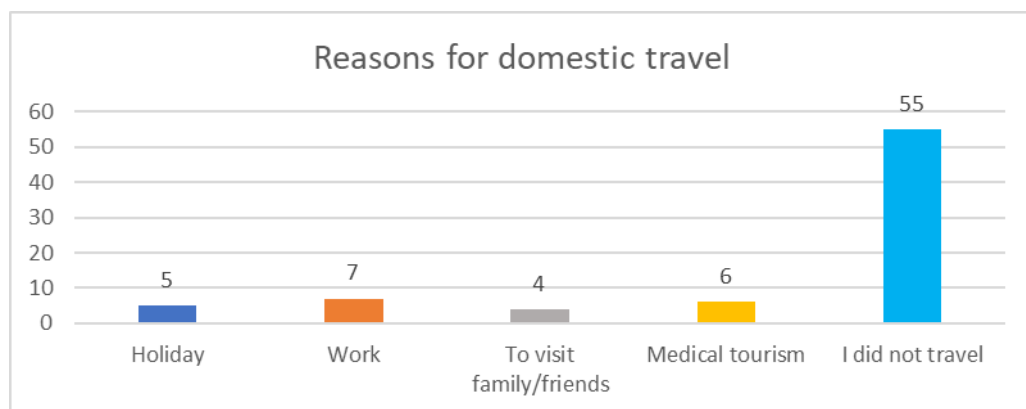


Figure 7. Reasons for domestic travel since 14/05/2020

In terms of air carriers, we can see a strong choice for national carriers, TAROM and Blue Air, but also for ultra-low-cost carriers, such as Ryanair. In an attempt to understand also how Romanian citizens make their choice of travelling with a certain company, they were asked how much specific factors contribute to their decision of flying with their chosen air carrier(s). The evaluation was also done on a five-point scale, 1 being “Not at all”, 2 being “Very little”, 3 being “Little”, 4 being “Much” and 5 being “Very much”.

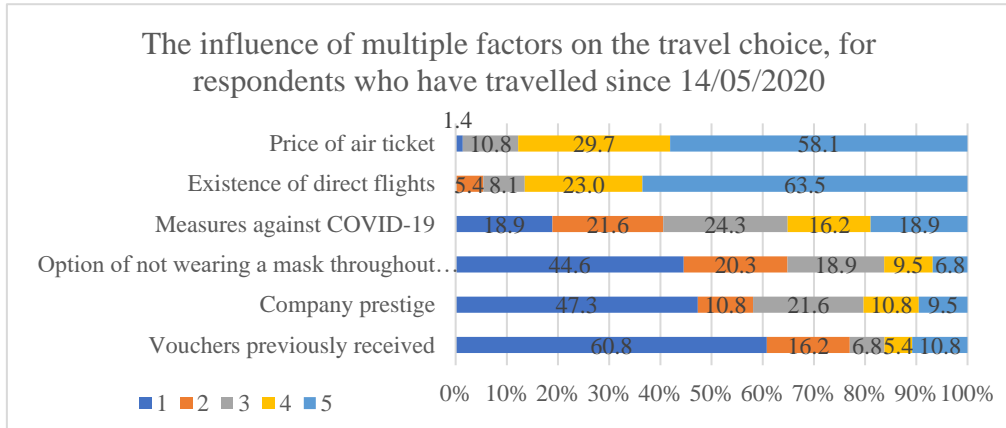


Figure 8. Influence of different factors on the choice to travel

We can see that the most part of respondents were inclined to choose the air carrier based on price, with 58% and almost 30% being influenced “very much” and “much” by this factor. The existence of direct flights also weighted a lot in making a choice, over 63% and 23% being affected very much or much, respectively. For measures against COVID-19, the answers were quite balanced, meaning that passengers feel safe and wish to travel regardless of the virus still being present among us, and did not necessarily prefer flights with or without mask requirements.

Discussion

Conducting this study has shown us multiple aspects of the perception of Romanian citizens on the air transportation during the COVID-19 pandemic. First, we could observe a strong desire for international travel, regardless of countermeasures (provided they allow travel) or company prestige, as long as the ticket price is convenient, and direct flights to the desired destination exist. This could be a good indicator for air carriers on what to focus – expanding their network through direct routes and revising their price range should be the key points in their strategy.

The domestic aviation is lagging behind quite a lot, and most likely price is a main reason. As the market is mainly dominated by Blue Air and TAROM, with some direct flights provided also by Ryanair and HiSky, prices stay quite high. On some domestic routes, TAROM has monopoly.

A solution for the growth of domestic aviation would be for the prices to be adjusted at a certain amount, just like Fly Romania tried to do, in 2014. Their first aim was to introduce daily flights (excepting Saturdays) between Timisoara and Bucharest at a fixed fare of €69.9 per flight, and three-times-a-week flights between Tulcea and Bucharest, at a fixed fare of €49.9, both rates including a carry-on bag of maximum 7 kilograms and a checked-in bag of maximum 20 kilograms, but also catering services on board.

Indeed, nowadays, with rising oil prices due to the war in Ukraine, it is very hard to implement the fixed prices, considering that the fuel represents 30% of an airline’s cost. According to Delta, higher oil price would mean an increase of 10% on air fares, but on a long term, fixed prices may provide more benefits.

Secondly, if company prestige is not one of the reasons passengers choose the air carriers, this allows newly launched companies to grow within the Romanian market. As shown above, even though HiSky is still a rather new carrier, as it was established in 2020, it has the opportunity to grow fast provided it meets the expectations of the customers.

Low-cost carriers have an opportunity of expanding and bettering the regional connectivity of the country. Besides the competitiveness of prices, we can also see how companies attract one another, and one good example of such is what happened in Cyprus, when Wizz Air introduced more flights in Larnaka and so from 2015 to 2017, the number of passengers increased by more than 1 million per year. Through new carriers, Romania also has this chance.

Moreover, an opportunity for airline companies is represented by the passengers visiting their family and friends outside the country. Almost 11 million Romanians live outside the country, with the Romanian diaspora being of almost 6 million in 2019, and is under continuous growth, which means that more and more Romanians might choose to use air transportation to visit their relatives and not only.

The findings of the paper were however limited in terms of generalizability due to the size of the sample. However, there is indeed an intention for future research which would focus on a larger pool of participants, and which will take into consideration other aspects of current interest.

Conclusion

After two decades of continuous transformations in terms of products, business models and services, the aviation industry was visibly not prepared for a disaster of such scale that COVID-19 was and still is, unfortunately. However, aviation is crucial for the recovery of global economy, as it is not considered only a paramount driver of global socio-economic growth, but also an essential catalyst for economic development, and exploring ways to reduce the impact of other potential coronavirus variants or diseases is necessary.

Driven by the European aviation industry, global recovery will be faster and faster, at least in some regions, and strong policies and right decisions from the economic actors will make this recovery efficient and will strengthen the risk management abilities.

COVID-19 brought opportunities for the aviation actors to learn. Now, airlines can be better prepared to deal with frequent and deeper disruptions (be they related to climate change, cybersecurity, or geopolitics), while protecting jobs and will be able to provide better solutions to customers' need in terms of travel. Moreover, airports should focus on improving the operational efficiency, and, for this, strong coordination across the industry is required, especially for the busy summer season that is expected.

In Romania, just like everywhere else, authorities should be prepared to act patiently during the recovery of tourism and aviation, but to also act quickly if inflation rates still rise. Above the inflation inflicted by the pandemic, authorities have to consider the aggravation of inflation caused by the war in Ukraine, as prices on oil and metals have already risen as a result of European sanctions on Russia.

While uncertainty remains, and should be an aspect embraced in any short-term and long-term planning, we can clearly see that the aviation sector, and the tourism

industry as a whole are on a good track to recovery, and will be better prepared for future disruptions.

It is indeed that the aviation industry will recover slower from COVID-19 than from previous coronavirus outbreaks. However, as we have seen, this pandemic was not just risks, but risks and opportunities for the aviation industry, as new perspectives have arisen in the attention of the industry actors. Moreover, a crisis of this scale should not go to waste, because the COVID-19 pandemic has the potential to be a true catalyst for change and innovation.

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GEOPOLITICS AND TREATIES OF THE SOVIET UNION DURING THE COLD WAR

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Abstract

The Soviet Union, one of the two global superpowers to the Cold War, has had over this period an ably adapted and pragmatically differentiated foreign policy, in an often successful and costly attempt to obtain influence, cooperation, security and sometimes a domination in the international relations plan. This fact led, with the temporary cost of the largest military budget in the world and exorbitant expenditures of military and economic assistance, to establishment and subsequent collapse of a huge military and political construction, of an influence empire and social-political system, atypical and unique in history.

Key words: *alliances, geopolitics, Soviet Empire, Cold War, treatises, The Soviet Union*

JEL Classification: P20.

The system of international relations, supported and sometimes even orchestrated by the Soviet Union (U.S.S.R.) led to the creation of two types of geopolitical spaces, part of a vast politico-economic-military construction that some authors call the Soviet Empire.

The so-called Soviet Empire, along with the two types of geopolitical spaces, included the 15 (temporarily 16) Soviet republics, among which the former Russian Soviet Socialist Republic did not hold a dominant position, being rather a financial supporter of the Soviet Union the so-called Soviet Empire¹. State entities that formed the former Soviet Union and are now independent states (the Ukrainian Soviet Socialist Republic, the Uzbek Soviet Socialist Republic, the Turkmen Soviet Socialist Republic, the Tajik Soviet Socialist Republic, the Moldavian Soviet Socialist Republic, the Lithuanian Soviet Socialist Republic, the Latvian Soviet Socialist Republic, the Kirghiz Soviet Socialist Republic, the Kazakh Soviet Socialist Republic, the Gagauz (Georgian) Soviet Socialist Republic, the Estonian Soviet Socialist Republic, the

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¹ This was due to the image of a bloc of states based on the socialist ideology, not on Russian nationalism, a nationalism that was felt culturally. In addition, Soviet leaders I.V.Stalin, N.S. Khrushchev were not Russian nationals.

Byelorussian Soviet Socialist Republic, the Azerbaijan Soviet Socialist Republic, the Armenian Soviet Socialist Republic).

The Soviet Union was created by the Treaty Establishing the Union of Soviet Socialist Republics concluded on December 30, 1922 and originally signed by the Russian Soviet Federative Socialist Republic, the Ukrainian S.S.R., the Byelorussian Soviet Socialist Republic² and the Transcaucasian Socialist Federative Soviet Republic. This treaty was repealed by the Belavezha Accords. The 1922 Treaty contains a preamble and 26 articles and is a flexible compromise between the national minorities of the Union while allowing the reception of new republics in a framework based on "socialist freedom" explicitly opposing in the Treaty to capitalism and colonialism.

Most of the states in the two types of geopolitical areas in which the influence of the Soviet Union is exercised have benefited from its economic and military assistance, generally offered on the basis of bilateral agreements of cooperation, friendship, assistance, etc. The Soviet Union has made a number of investments in these states, amounting to 140 billion US dollars at the time of the dissolution of the Union.³

In our view, the *first geopolitical space* is a stable one over time, based on relations of *cooperation, security and hegemony*, and the states that were part of it between 1945 and 1991 concluded bilateral treaties of friendship with the Soviet Union. These states were in most cases members of the Warsaw Pact Organization⁴ or the Council for Mutual Economic Assistance (K.A.E.P.), the Soviet Union could intervene directly with troops when it considered that the rule of law or the values of socialism were endangered (Brezhnev Doctrine, etc.). In this area the U.R.S.S. exercised serious political, economic, and military control, maintaining troops or military bases as desired. This area included *integrally* the Polish People's Republic, the German Democratic Republic, the Czechoslovak Federal Socialist Republic, the Romanian Socialist Republic, the Hungarian People's Republic, the Bulgarian People's Republic, the Mongolian People's Republic, the Vietnamese Socialist Republic, Cuba and partly the People's Democratic Republic of Afghanistan, the Democratic People's Republic of Korea and the People's Socialist Republic of Albania (excluding the period of relations deterioration between 1955 and 1973).

In a special situation, the Federal Socialist Republic (People's Republic of Yugoslavia), which was in cordial relations with the U.S.S.R. between 1945-1948 and 1957-1991 concluded two treaties of friendship with the Soviet side, one in 1945 and another in 1957. The agreement signed on April 5, 1945, allowed the temporary entry of Soviet troops into Yugoslav territory. To these treaties is added an Association Agreement to the Council for Mutual Economic Assistance in 1964, with Yugoslavia

² To increase Soviet influence in the United Nations (UN) General Assembly, the Ukrainian S.S.R. and the Belarusian S.S.R had their own votes.

³ Dmitri Trenin, *Post-Imperium: A Eurasian Story*, Carnegie Endowment for International Peace, 2011, p. 144.

⁴ The Treaty of Friendship, Cooperation and Mutual Assistance was signed on 14 May 1955 in Warsaw, and was abolished on 1 July 1991 (https://en.m.wikipedia.org/wiki/Warsaw_Pact). They were part of the Warsaw Pact Organization: the Soviet Union, the Polish People's Republic, the German Democratic Republic, the Czechoslovak Federal Socialist Republic, the Romanian Socialist Republic, the Hungarian People's Republic, the Bulgarian People's Republic and the Albanian People's Socialist Republic until 1968. , other socialist states within the KAEP also participated in the work of the Organization as observers such as the Mongolian People's Republic after 1963. Although apparently an international collective security alliance, the U.S.S.R. controlled and coordinated the armed forces of the Warsaw Pact Organization.

participating in most of the organization's structures as a member with special status. However, internationally this state was considered unaligned. However, the Yugoslav government made available to the Soviet state based on bilateral agreements the naval locations at Split and Tivat necessary for the Soviet Navy in the Mediterranean Sea. Another special case is that of Finland, which remained unaligned since the conclusion of the Soviet-Finnish Agreement on Friendship, Cooperation and Mutual Assistance on April 6, 1948 (YYA Treaty) and which until 1991 would have a strong Soviet influence in its internal affairs. The Soviet side also obtained a military naval location at Porkkala. The treaty offered security guarantees only to Finland, against the Federal Republic of Germany and its allies, in fact against the United States. The treaty did not allow Soviet intervention on Finnish territory without a prior request from the Finnish side.⁵ Also another special situation is the case of Malta, an official non-aligned state, which under the Treaty of Friendship with the Soviet Union has provided a naval location near Valletta for the Soviet Navy since 1980.

The second geopolitical space, in our opinion, is one of *influence, alliance and assistance*, the assisted states belonging with the exception of the P.R of China to the third world. The Soviet Union concludes agreements with a number of such states that entered within its sphere of influence for a period of time. However, some of those states will officially retain their *non-aligned status*. In fact, the Soviet Union did not give unselfish political, economic, and military support to these states, but to the "friendly" regimes that temporarily ruled them, which followed the political direction of the Soviet government. This space included several states, mentioned in the following lines, in time intervals that followed one another for over four decades.

In the Far East, the People's Republic of China concluded a treaty of friendship, alliance and mutual assistance with the Soviet Union on February 14, 1950, partially inapplicable since 1960, which expired on February 16, 1979. By this treaty, the Soviet Union recognizes the People's Republic of China, the two states promising mutual support in the event of aggression by Japan or its allies, a form specific to Soviet diplomacy, with potential allies being the United States. Through the Treaty, the Soviet side brought a number of territories and facilities back under Chinese control: Xinjiang, Manchuria, including the ports of Dalian and Lushun. The Soviet side offered the Chinese side a \$ 300 million loan⁶, needed to rebuild the unmodernized and war-torn Chinese economy, as well as economic assistance. Soviet economic assistance has been drastically reduced since 1960, with the People's Republic of China withdrawing from the Council's Mutual Aid Council and four years later from the organization's market, which it will return to in 1983. From 1989 onwards, the cooperation will include the provision of military assistance by the Soviet Union to the People's Republic of China. The allies of China and the USSR, Indonesia, under an agreement benefited from economic, financial and military assistance (including loans) provided by the Soviet side to the Sukarno regime from 1959 to 1965, the country providing the Soviet Union with a submarine location.

In Central Asia, India has benefited from military assistance since 1955 and security guarantees (in relations with the United States and the People's Republic of

⁵ https://en.m.wikipedia.org/wiki/Finno-Soviet_Treaty_of_1948.

⁶ https://en.m.wikipedia.org/wiki/Sino-Soviet_Treaty_of_Friendship,_Alliance_and_Mutual_Assistance.

China) from 1971 until the collapse of the Soviet Union in 1991, according to the Peace Treaty, Friendship and co-operation concluded on 9 August 1971. The preamble to the Treaty generally affirms the previous good relations between the Parties and their desire for peace and co-operation. The convention in art. IX and X create obligations for the parties not to grant any kind of support to another state with which a party is in conflict and in case of any external military aggression against any of the signatory states, they will immediately proceed to consultations to take the measures required⁷. Due to its strategic importance, this country received the most comprehensive military, economic and financial assistance in the Third World. For example, in 1960, economic and military assistance to India exceeded that of R.P. Chinese, which irritated the Chinese side, the USSR's official ally at the time. India's geopolitical rival, Pakistan receives political assistance (especially advisers, experts and technicians) and economic⁸ in favor of the Bhutto Regime, in particular between 1972 and 1977, in accordance with the 1974 Agreement on Friendship, Cooperation and Mutual Trust⁹, assistance was phased out after April 4, 1979. In the same geographical area, the People's Republic of Bangladesh received considerable political, economic and military support (air and naval) from 1971-1975 from the Soviet and Indian sides, which was later reduced and ended amid diplomatic tensions. The two countries were the first to recognize the statehood, sovereignty and independence of Bangladesh on January 25, 1972. The Indian Union and the People's Republic of Bangladesh signed the Treaty of Friendship, Cooperation and Peace (Indira-Mujib Treaty) on 19 March 1972, similar in content to the bilateral treaties concluded by the Soviet side during the Cold War. By the Treaty in Art I. The parties recognize their independence, sovereignty and territorial integrity, ensuring mutual relations of peace and friendship. The parties undertake to eliminate the consequences of colonialism and racism and to work together to maintain international peace and security (Art. II-III). Art. VIII-X includes military and security provisions, the parties undertaking "*not to participate in alliances or actions to the contrary, and if a Party is attacked or threatened, they shall immediately enter into consultations with each other in order to take the necessary measures to remove the threat and to ensure their peace and security*".¹⁰ The treaty was concluded for a period of 25 years, but after the fall of the Mujib regime, the relations of the People's Republic of Bangladesh with the Soviet Union and the Indian Union gradually diminished and even compromised, with the Bangladesh Party avoiding the extension of the Treaty in 1997. Friendships and support were established by the U.S.S.R and its regional ally India and the (Democratic Socialist) Republic of Sri Lanka after 1958 and especially until 1978, but relations with the Soviet Union diminished as the Sri Lankan side continued to impose socialist measures on the economy.

In Indochina, the Socialist Republic of the Burmese Union (Burmese People's Democratic Republic) received economic and military assistance to the Ne Win regime from 1962-1968. Also in Southeast Asia, the Lao People's Democratic Republic, between

⁷ https://en.m.wikipedia.org/wiki/Indo-Soviet_Treaty_of_Friendship,_and_Cooperation.

⁸ For example, the Pakistan Steel Mills complex started in 1972 or Soviet interests in the port of Karachi.

⁹ Completed in accordance with the request of the Pakistani parliament in 1972, the withdrawal of this state from CENTO and SEATO in 1974, followed by the US embargo from 1976-1977.

¹⁰ https://en.m.wikipedia.org/wiki/Indo-Bangla_Treaty_of_Friendship,_Cooperation_and_Peace.

1975 and 1991, entered into a friendly treaty between the Vietnamese Socialist Republic and its guarantor, the USSR of this state to the Council for Mutual Economic Assistance in 1986. Another state that entered the sphere of Soviet influence in this region during the years 1979-1989 was the People's Republic of Kampuchea, which also concluded treaties of friendship with the U.R.S.S. and the Socialist Republic of Vietnam.

In the space of pan-Arab socialism, and in the Muslim world in general, the *Syrian Arab Republic* was the Soviet Union's most loyal political and military ally in the Middle East between 1955 and 1991. The U.R.S.S. obtained by agreement the naval locations of Latakia and Tartus. The Democratic People's Republic of Iraq purchased weapons as one of the Soviet Union's best customers during 1958-1963 and 1968-1991. Rival of Iraq, Iran received political support between 1951-1953, and cooperation, including through military assistance, was resumed after 1980. The Arab Republic of Egypt, (United Arab Republic), received the widest military assistance between 1954-1976, economic and financial of the Third World after India, assistance granted to the Nasser and Sadat Regimes, treaties of friendship and cooperation being concluded in 1954 and 1971, the last being officially abolished in 1976. USSR obtained by agreement the naval military locations from Alexandria and Marsa Matruh. *The Libyan, Popular and Socialist Arab Jamahiriya* was one of the best clients of the Soviet defense industry between 1969 and 1991 during the Gaddafi regime, benefiting greatly from Soviet assistance. Military assistance and economic exchanges were achieved through numerous one-off agreements, forming a true Soviet-Libyan alliance, without a framework treaty to that effect.

The Soviet Union agreed to the naval locations at Tripoli and Tobruk. The People's Democratic Arab Republic of Algeria received economic and military assistance from 1962-1990, including indirect support in the Western Sahara conflict in which it was involved. The Soviet side obtained a naval base at Mers el Kabir by agreement.

The only real communist Arab state, the People's Democratic Republic of Yemen, maintained a close friendship with the socialist countries between 1967 and 1990, a fact recognized internationally by joining the state as an observer at the Council for Mutual Economic Assistance in 1986. The Soviet Union received by agreement the naval military locations at Aden and Socotra. The Arab Republic of Yemen concluded assistance agreements with the Soviet Union, which received a military naval location at Hodeidah from the 1970s until 1987.

In Latin America, the United States of Mexico received economic cooperation and military assistance (especially naval) from the Soviet side from 1975, with its admission as an observer to the Council for Mutual Economic Assistance until 1982. The close relations (which could not lead to a military alliance contrary to traditional Mexican policy)¹¹ were encouraged also by the often radical leftist position of the Mexican executive, materialized by the nationalization of certain sectors of the economy, tensions with the United States, and support for Nicaraguan Marxists.

After visits of Mexican heads of state to Moscow in 1973 (Alvarez) and in 1978 (Portillo), the U.S.S.R acceded to the Treaty (from Tlatelolco) on the Prohibition of

¹¹ Mexico being a member of the Organization of American States (OSA), as a result of not being able to legally engage in security conventions contrary to the US, this state pursuing a general policy of non-alignment during the Cold War, but still politically closer to the United States until 1973 and after 1982.

Nuclear Weapons in Latin America and the Caribbean)¹². The Treaty in Art.1 presents the commitment of the Parties to “use only peacefully the nuclear facilities under their jurisdiction and to prohibit and prevent in their territory the testing, use, manufacture, production or acquisition or reception, storage, installation and placement”¹³ of nuclear weapons. *The Republic of Nicaragua was in excellent relations with the U.S.S.R, Cuba and the rest of the members of the Council for Mutual Aid, which it joined in 1986 as an observer.* Grenada, in the name of embracing the cause of socialism, in the period 1979-1983 obtained economic assistance from the K.A.E.P., including military assistance from Cuba. Friendships and cooperation were also established between the Soviet state and the Republic of Panama between 1962 and 1984.

In South America, the Argentine Republic received military assistance during the Peron Government between 1973 and 1976, and after 1983 economic cooperation and the provision of military equipment and assistance were resumed. However, this country did not become a regional ally of the Soviets. The Republic of Peru was the main beneficiary of Soviet economic and military assistance in South America during the two left-wing regimes that ruled the country (1968-1975 and 1975-1984), U.S.S.R. obtaining the positioning of a military base. The Republic of Chile, in turn, hoped for assistance from the Soviet Union and the Mutual Aid Council during the Allende regime between 1970 and 1973, but got a quarter of the investment it expected. Also in this region, close relations with the Soviet Union were fostered by the Cooperative Republic of Guyana between 1980-1991, the last state participating as an observer in the meetings of the K.A.E.P. Ephemeral friendships have been established by the U.S.S.R. and Cuba with the Republic of Bolivia between 1969 and 1971, compromised by the subsequent military regime, and good relations resumed after the end of the Cold War by the Russian Federation.

In East Africa, the Democratic Republic of Sudan has received Soviet economic, military, and logistical assistance since 1968 (including military locations), which was reduced to tensions in 1972 and shut down in 1977. *The Democratic-Socialist Republic (Ethiopian People's Republic) of Ethiopia* received substantial Soviet and Cuban financial, military and logistical support from 1974-1991, maintaining cordial relations with the socialist bloc, which is evident internationally by its joining as an observer the Mutual Aid Council in 1986. USSR obtained by agreement the military naval location of the Dahlak Archipelago, strictly necessary for the Indian Ocean fleet after the loss in 1977 of the base in Berbera (Somalia)¹⁴. The Democratic Republic of Somalia was a socialist ally that gave the Soviets an excellent position in the Horn of Africa during the Bare Regime between 1969 and 1977, with the Soviet Fleet gaining an excellent location in Berbera¹⁵. The United Republic of Tanzania, a socialist state, also benefited from Soviet assistance after 1964, often serving regional interests, but often contradicting them by pursuing a nationalist path and a foreign political oscillation

¹² https://en.m.wikipedia.org/wiki/Tratado_de_Tlatelolco

¹³ https://es.m.wikipedia.org/wiki/Tratado_para_la_Proscripcion_de_las_Armas_Nucleares_en_la_America_Latina_y_el_Caraibe

¹⁴ See in this regard, Oleg Sarin, Lev Dvoretzky, War on the human species - Soviet aggression against the world 1919-1989, Editura Antet, București, 1997, p.169-180.

¹⁵ Idem. p.169-180.

between the U.S.S.R. and the P.R. of China¹⁶. The establishment of a pro-Soviet regime in Seychelles with Tanzanian support between 1977 and 1991 led to the establishment of a Soviet naval location for the Indian Ocean fleet.

In Central Africa, the Republic of Uganda cooperated militarily with the Soviet side during the Obote (between 1969 and 1972) and Amin (between 1972 and 1979) regimes. Ephemeral friendly relations were also established with the Central African Republic (1970-1976) during the presidential regime of Bokassa, which, adhering to the values of scientific socialism, obtained economic assistance from the Soviet Union, but also with the Democratic Republic of Congo between 1960 and 1961, during the Lumumba government (where although there was parliamentary support, the presidency opposed direct Soviet military assistance relations in order to maintain law and order in the state).

In West Africa, the Republic of Ghana obtained Soviet assistance from 1964-1966¹⁷, on the principle of supporting the states that build socialism, the latter acquiring Soviet weapons even after 1969. The People's Republic of Benin also joined in the period 1975-1990, the Soviet sphere of influence and interests. The People's Democratic Republic of Guinea was the Soviet Union's most stable political and military ally in West Africa from 1960-1978. In agreement with the Guinean government, the Soviet state has set up a naval military base in Conakry to protect its strategic interests in the region. The Republic of Mali used the Soviet model and economic and military assistance between 1960 and 1968, which was later reduced.

The Republic of Burkina Faso between 1982 and 1987, during the Samkara Regime, implemented a Marxist-inspired social model, establishing close bilateral relations with the Soviet side and obtaining military assistance from it. The pro-Marxist government of the Republic of Guinea Bissau developed a close rapprochement with the Soviets between 1973 and 1991. The left-wing political power in the Republic of Cape Verde, continuing the tradition of cooperation during the colonial conflict between 1975 and 1991, maintained a privileged relationship with the Soviet Union. The USSR also provided economic and military assistance to Mauritania after 1979, with Soviet weapons reaching Algeria and the Sahrawi Arab Democratic Republic after 1976. There was also a form of influence in the Republic of Nigeria that began with military assistance to the state by the Soviet Union (along with the United Arab Republic) during the Biafra Conflict, 1967-1973, which continued until the break-up of the state. Soviet, leading alongside the British superior position in Nigerian trade. At the United Nations General Assembly, the U.R.S.S. and Nigeria cooperated in condemning South Africa's domestic and foreign policies.

In South-West Africa, the Democratic People's Republic of the Congo had special relations with the Soviet state from 1969-1991, obtaining economic and military assistance but providing the Soviet side with a naval base at Port Noire. In the same region, the People's Republic of Angola became, during the years 1975-1991, the most assisted military state by the Eastern Bloc in southern Africa, the Angolan socialist state joining the socialist community and the KAEP meetings as an observer since 1986. This country, based on friendly legal relations established in 1975, hosted advisers from the Soviet bloc and a Soviet naval military base in Luanda.

¹⁶ Idem. p.169-180.

¹⁷ https://en.m.wikipedia.org/wiki/Soviet_Empire

In agreement only with the Government of the Democratic People's Republic of Angola and without prior consultation with the Soviet side, the Republic of Cuba sent combat military units to the country, which were (with the expected result) involved in the internal conflict in that country.¹⁸ Between 1968 and 1979, the *Republic of Equatorial Guinea* was a spearhead of the Soviet export of revolution in sub-Saharan Africa, which also housed a Soviet military base on its territory. A similar situation occurs in the case of the *Democratic-Socialist Republic of Sao Tome and Principe* during the years 1975-1991, which received Soviet economic assistance and provided accommodation for the Soviet military fleet operating on the west coast of Africa.

In *Southeast Africa, the Malagasy Democratic Republic*, in turn, developed a Soviet-backed project to build socialism between 1972 and 1991. Also in the same region, the People's Republic of Mozambique became the most loyal Soviet ally between 1975 and 1990, a state attached to the socialist community, a fact consecrated by receiving in 1986 as an observer of this state in the work of the K.A.E.P. In exchange for economic and military assistance, the Soviet side was given the right to place a naval base in the Port of Maputo. In the same geographical area, the Republic of Zambia also benefited from 1967-1991 of a stable relationship of friendship, cooperation and assistance from the U.S.S.R.

Conclusions

The spheres of security and Soviet influence were differentiated geopolitically according to the chronological evolution of the Cold War. In the 1950s and early 1960s, the Soviet Union developed a system of alliances that would allow it to have obvious land dominance over the Eurasian Plateau, from Albania to Indonesia, thanks to a visible favorable difference in ground forces. This aspect is also found in the conception of priorities in the field of Soviet foreign policy, which focused on relations with neighboring states in Europe, Asia and the Arab World. However, the faction of relations to some communist states, such as the case of the People's Republic of China, which compromised the 1949 Treaty of Friendship and the collapse of friendly regimes in states such as Indonesia or Iran, forced Soviet state power in the 1970s. 80s "to find new political alliances in the Third World, countries generally at considerable distances from the borders of the USSR.

This, along with the Cuban Crisis, forced the Soviet Union to incur additional military spending on huge expenditures already made, especially in order to provide military assistance to the new "friendly states," as well as to build a colossal war fleet. The new allies, who often shared only the most formal Soviet ideology, were good markets for Soviet armaments, but they did not always pay for it. Often the U.S.S.R supported socialist states that became regional promoters of the export of revolution, the limits of the Soviet sphere of influence extending further and further beyond its borders. Thus, some pro-Soviet zonal powers formed their own regional influence, which may or may not involve, as the case may be, Soviet policy.¹⁹ In fact, in the

¹⁸ See in this regard, Oleg Sarin, Lev Dvoretzky, *War on the human species - Soviet aggression against the world 1919-1989*, Editura Antet, București, 1997, p.169-180.

¹⁹ For example, Vietnam has formed its own military assistance relations with Laos, Kampchia and North Korea, India with Bangladesh and Sri Lanka, Syria with Lebanon, Egypt with Syria, the Yemen and Nigeria Arab Republic, Libya with Uganda and Egypt, Cuba with Nicaragua, Congo, Grenada, Angola and Ethiopia.

1970s, American analysts feared the "expansionism" and "encirclement" of the West with friendly states of the Soviet bloc, countries usually ruled by dictatorships with left-wing political excesses.

The situation is somewhat repeated in the 1950s, when the United States, in an attempt to stop communism, surrounded the Soviet bloc with a series of alliances in which some allied regimes were far from constituting Western-style democracies. We also have the following remark: some works appreciate the territorial maximum influence of the Soviet Union before the faction with the People's Republic of China, i.e., in 1960. In our opinion the maximum territorial influence is exerted in 1975. Even if the Soviet Union loses the alliance with the People's Republic of China and Indonesia, it managed to conquer influence over many countries such as: India, Algeria, Libya, Sudan, Ethiopia, Somalia, Uganda, Mozambique, Madagascar, Zambia, Angola, Congo, Peru, Argentina, Burma, Laos, South Vietnam, North Yemen, Yemen South, Bangladesh, Peru, Panama, Guinea, Cape Verde, Guinea Bissau, Equatorial Guinea, Sao Tome and Principe, etc.

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10. https://en.m.wikipedia.org/wiki/Warsaw_Pact

In general, these regional policies were complementary to Soviet foreign policy, but in some cases the Soviet Union was not directly involved so as not to compromise relations with some affected states in the area. For example, Algeria and Mali assisted the Sahrawi Arab Democratic Republic (R.A.D.S.) with Soviet weapons, but the Soviet bloc did not become directly involved with the RADS, even though it defined itself as a Marxist-oriented socialist state, so as not to damage relations with Morocco.

THE IMPACT OF THE COVID-19 PANDEMIC ON ROAD FREIGHT TRANSPORT: A CASE STUDY ON SUCEAVA COUNTY, ROMANIA

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Abstract

The Covid-19 pandemic has brought changes to the whole of society, to all aspects of daily life, and the economy has also been affected. In this article we aim to show the impact of the Covid-19 pandemic had on companies that have as their object of activity the road transport of goods in Suceava county, Romania. After identifying the indicators, applying the principal component analysis technique we extracted those indicators that bring maximum information. Further, using the clustering technique and SAS Enterprise Guide software, we divided the companies into three distinct, homogeneous classes. In the last part of the paper we analyzed the effect of the pandemic on the transport sector in Suceava county.

Keywords: *transport, covid-19, classification, SAS Enterprise Guide, Suceava*

JEL Classification: C38, D22, D24, N74

1. Introduction

The economic, social and environmental implications of the COVID-19 pandemic and the post-pandemic period are felt in everything we do every day from the most complex professional tasks to every basic action of the individual day. In addition to the impact on global health, the first major impact of the COVID-19 pandemic was on the supply of basic commodities. The world has come to a standstill, but basic needs are constantly real, and the need for goods to meet basic needs in a static context: lockdown, work from home, physical shopping in totally inaccessible stores pushed a shock wave that went around the globe, so that the road freight transportation performance became an unheard of urgent derivative economic development demand [3], between supplying goods to the warehouses, stores and

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institutions that protected humanity and finding a fast delivery solution the public-private partnership imposed its brand of sustainability. While finding road delivery solutions after a total shutdown, development strategies have been geared towards the likelihood of future economic downturns.

If we consider that policies at national level are decided and set for implementation only after statistical analysis of macro-economic indicators, the need for mathematical analysis of the correlation between the impact of all these global phenomena on national economies becomes evident. Analyses of this kind are imperative to manage reaction time, recovery time from shock and damages and above all to facilitate quickly and flexibly the arrival of goods at their destination on the most basic mode of delivery: road freight transport.

As the general good's loading points suddenly shut down and a strong wave of road deliveries, with low levels of consumption up to the time of the pandemic, which required the reconfiguration of road freight routes, generated a destabilising confusion, road transport of general and special goods, temperature controlled, sterile goods transports for hospitals, took over by truck FTL, LTL, van, bus, trailer, ambulance, personal cars, by any means of the goods supply, getting the goods needed to sustain life to people. The COVID-19 pandemic has thus caused significant disruptions in the freight transport sector [4], companies in this sector have carried in their responsibilities not only their own commercial survival and the social protection of their employees but also the national social responsibility dictated by the global crisis. In this context, in response to the reorientation of international freight flows to several different located loading points, the state and dynamics of the international road freight transportation market [5] has been the most structurally affected, the evolution being imposed not for profit but for survival. Some road haulage companies have found strategies that have propelled them to the top of the market, some companies have been forced to shutdown in debt instantly.

The rapid onset of the COVID-19 pandemic [6] marked a challenging time for the road freight industry as the known transport patterns changed radically with the unexpected shift to e-commerce. Thus, road transport of goods door-to-door or to easy-boxes positioned as accessible as possible to the final consumer, was an essential component of pandemic resilience, demonstrating a high level of adaptability to meet consumer and business demands.

In a related way, for road freight transport companies that have re-focused on flexibly meeting the requirements of the intermediary customer and the final consumer, COVID-19 had a positive impact on the road freight transport turnover [7]. The logistics corridors between cities logistics hubs [8] were analysed and it was proposed to collaborate and unite several transport companies towards reaching final destinations, unloading trucks in cross-docking warehouses equipped with ramp docking systems and delivering with small tonnage vehicles in areas difficult to access 24-ton trucks or semi-extensible trailers were decisions that played the role of profitable development of some companies. Particularly during the period of the COVID-19 pandemic, both road and air transport had a major impact, on the other hand ocean freight had a statistically insignificant impact in the context [9] due to long transit times from 31-33 days to 65-70 days in ocean and sea transit plus days of stationing in ports for customs and physical checks of containers.

Analysis of the global impact of this socio-economic and medical phenomenon, as well as analysis of how road transport companies have managed to evolve structurally for, and analysis of other past economic and financial crises, allows the transport sector to handle future crises effectively and proactively [10]. We now know that in the event of a crisis of any kind, the first vital pressure falls on two-phase road freight transport. As happened in the spread of COVID-19 pandemic in spring 2020, the first phase is the rate of decrease in traffic volume by road transport types [11], because it destabilizes the map of needs in crisis situations. The shock wave is the one that blocks road arteries, because it generates an increase in personal transport whether it is a migration between urban areas or between rural and urban areas, whether it is trying to reach the goods necessary for individual survival, or trying to distribute vital goods locally with cars, 1 or 2 ton vans, 4 or 5 ton vans. Road haulage takes all the pressure of both getting the goods to the final destination and reconfiguring the way the goods reach intermediate customers and final consumers. The idea of integrating freight in passenger transit networks [12] is also one of the strategies to lower transport costs and facilitate access to goods in the shortest possible time. The second phase is the increasing demand for groupage road transport by truck (several types of products, belonging to several commercial entities) followed by the demand for road transport by truck to logistics hubs. Thus, the connectivity of the trucking network can also be impacted by the virus spreader [13] and like-wise act as a virus spreader. Thus, in addition to the standard costs of transporting goods: fuel, tolls, insurance, there are also the costs of cleaning and disinfecting the truck inside and outside.

Linked to the increase in road freight transport is the high cost of emissions of the main greenhouse gases (GHG: CO₂, CH₄, and N₂O) and other pollutants (NO_x, CO, NMVOC, SO₂, PM₁₀, PM_{2.5}, and BC) from various sectors such as private road transport, freight, public transport, agriculture machines, thermal power plants, residential, commercial, and governmental[14].

As a result of global analysis, road haulage companies have made significant efforts to reduce this environmental impact by switching from fossil fuel to electric vehicles, with the cost of purchasing electric road haulage vehicles also being supported by government entities. Public-private partnership in this sector is a sine qua non, as private companies use public infrastructure and public entities serving citizens depend on easy access to goods and services in real time.

Each road haulage company, although having its own specificities, is included in a specific category alongside other companies of the same time. Studying companies according to the category they belong to helps to draw guidelines that establish patterns of action and support in the event of another global crisis. Studying the effect of the COVID-19 pandemic on companies in distinct, regionally homogeneous classes according to crisis-generating focal points is necessary to provide patterns of proactive operational recovery and replenishment.

2. Defining the problem, data and coding of the indicators

The issue we propose to debate in this research paper is to demonstrate whether or not the Covid-19 pandemic has had an influence on the companies that are engaged in road freight transport in Suceava County. We have chosen this county because in 2020 the pandemic had a strong impact in this region.

The indicators taken from the balance sheets of the companies are the following: turnover, net profit, revenues, expenses, debts and average number of employees for 2020 (Table 1)..

Table 1. The indicators used in the analysis

| Crt. No | Coding the indicator | Description of the indicator |
|---------|----------------------|------------------------------|
| 1 | I1 | Turnover (RON) |
| 2 | I2 | Net Profit/Loss (RON) |
| 3 | I3 | Income (RON) |
| 4 | I4 | Expenses (RON) |
| 5 | I5 | Debt (RON) |
| 6 | I6 | Average number of employees |

Turnover is the sum of a company's receipts. It is the way to measure the performance of companies, regardless of size, and can be classified according to financial strength. When the formula is applied to a company, it does not include in the revenue that we add invoiced VAT, discounts granted for goods and services sold, subsidies, dividend and interest income or foreign exchange gains.

The revenues represent the total income brought into the company in an accounting year, and the expenses sum up all the company's expenses.

Net profit is calculated as the difference between gross profit and income tax. Thus, gross profit is calculated as income minus expenses. Depending on the company's field of activity, the country in which it operates or other financial and accounting conditions, the corporate tax rate may differ.

A company's debts refer to the amounts of money it has to pay to suppliers, third parties for services, employees, etc.

For each company we have recorded the values for the indicators in the balance sheet for the year 2020 using the website topfirme.com. The recorded values of the indicators are shown in table 2.

Table 2. The values of the indicators used in the analysis for 2020

| The company | I1 | I2 | I3 | I4 | I5 | I6 |
|--------------------------|----------|---------|----------|----------|----------|----|
| Romoldova SRL | 28469846 | 4042705 | 30223955 | 25572282 | 2403227 | 3 |
| Stinav SRL | 22173242 | 2990144 | 24348031 | 20835121 | 5308341 | 36 |
| Stidanpet Trans SRL | 21554110 | 5553556 | 23096234 | 16540940 | 5164579 | 34 |
| Soldori Trans SRL | 21112987 | 44142 | 21345991 | 21276251 | 8348402 | 53 |
| Alpha Cargo Expres SRL | 18937987 | 1103107 | 20467816 | 19271431 | 627333 | 43 |
| Trans Zamfir SRL | 18533814 | 1666177 | 20952043 | 19047414 | 381241 | 41 |
| Iltioi Transport SRL | 17908419 | 4438456 | 20069468 | 14856975 | 7214181 | 27 |
| Florian Bruder Trans SRL | 17767150 | 1244489 | 17891879 | 16470102 | 3129803 | 41 |
| Tgg Service Trans SRL | 16681791 | 1053637 | 19137625 | 17924477 | 2358020 | 43 |
| Constantin Pas SRL | 15378949 | 1752501 | 15529109 | 13486178 | 5537864 | 5 |
| Pap Trans SRL | 15125999 | 865784 | 15648187 | 14649567 | 7235381 | 20 |
| Ac Mobile SRL | 15006747 | 2501944 | 19313172 | 16451284 | 10494006 | 44 |
| M-System SRL | 14910476 | 1081438 | 16084764 | 14840599 | 3673242 | 39 |
| Every Day Prod-Com SRL | 14794408 | 60817 | 16626354 | 16548073 | 1669580 | 69 |
| Truk-Ierbac SRL | 14283609 | 2046526 | 16480254 | 14123948 | 646824 | 37 |

| | | | | | | |
|----------------------------------|----------|---------|----------|----------|---------|----|
| CorneTrans SRL | 14158738 | 850612 | 15925754 | 14938553 | 3851214 | 37 |
| Ovi Vali SRL | 14107614 | 2157556 | 16233652 | 13736529 | 4758327 | 40 |
| Stehlmann Trans SRL | 13586858 | 1254191 | 13957237 | 12508129 | 1586745 | 0 |
| Tolpost SRL | 13493183 | 546662 | 15861729 | 15246528 | 3119367 | 44 |
| Cupola Comserv SRL | 13398216 | 154641 | 14035908 | 13850340 | 6072507 | 52 |
| Way Farer Trans SRL | 13356924 | 1041129 | 13637975 | 12427009 | 4018069 | 21 |
| Torsen-Sim SRL | 13325428 | 61616 | 14411837 | 14315611 | 2119778 | 49 |
| Elidora SRL | 12643235 | 776226 | 13636834 | 12734964 | 7373574 | 9 |
| Marpas SRL | 12608566 | 146552 | 12693704 | 12517966 | 3201674 | 26 |
| Euro Vasilas SRL | 12605245 | 474221 | 12813767 | 12259250 | 5508195 | 24 |
| Mihai-Luca Trans SRL | 12526680 | 107026 | 12742058 | 12595738 | 4984787 | 26 |
| Hlihor Trans Com SRL | 12409278 | 580563 | 12495770 | 11823687 | 2146549 | 24 |
| Labirint-Com SRL | 12378566 | 168437 | 12996871 | 12774422 | 8972620 | 77 |
| Adm Expres Group SRL | 11549310 | 288536 | 12269372 | 11923138 | 4829616 | 16 |
| Profisped SRL | 11494295 | 315018 | 11886287 | 11484030 | 2853352 | 18 |
| Saturn SRL | 11148012 | 2978020 | 12348187 | 8919790 | 877225 | 29 |
| Farlan Trans SRL | 10947136 | 309186 | 11190594 | 10827945 | 2529710 | 19 |
| Ripac Professional SRL | 10886436 | 1223193 | 11284517 | 9889196 | 3567528 | 22 |
| Euro Milex Group SRL | 10691755 | 826239 | 10938827 | 9933740 | 2687285 | 36 |
| Deli Trans SRL | 10391870 | 1497929 | 10921668 | 9215660 | 3335054 | 24 |
| United Euro Spedition SRL | 10369666 | 908936 | 11579465 | 10518825 | 1049044 | 28 |
| Trans Luky SRL | 10203065 | 853284 | 10687523 | 9789800 | 9395528 | 25 |
| Vasy Bol Cargo SRL | 9710812 | 440984 | 10366613 | 9838930 | 2741000 | 25 |
| European Tractor Specialist SRL | 9927900 | 1624007 | 11861924 | 10007125 | 738358 | 28 |
| Helios Car SRL | 9704781 | 595469 | 10602507 | 9900701 | 3615584 | 38 |
| King Com Trans International SRL | 9664701 | 1921896 | 10682759 | 8419536 | 3380415 | 18 |
| Pitar SRL | 9628431 | 266082 | 10678035 | 10378687 | 2801159 | 23 |
| Demetris SRL | 9223171 | 9371 | 9770717 | 9651569 | 2267053 | 27 |
| Seb Cargo SRL | 9179348 | 226814 | 9492279 | 9228199 | 2564250 | 5 |
| Nord Spedition SRL | 9118835 | 782799 | 9908634 | 9044967 | 2811888 | 17 |
| Mirinec SRL | 9068733 | 952851 | 10923525 | 9817970 | 1759482 | 25 |
| Johandav SRL | 9061133 | 293891 | 9460526 | 9113828 | 2102338 | 15 |
| Pro Via Express SRL | 9009646 | 1489418 | 9387263 | 7684977 | 1476578 | 17 |
| Benoni Speed SRL | 8954096 | 2379401 | 9538410 | 6811946 | 670978 | 13 |
| Beniberti SRL | 8712041 | 1641920 | 9410332 | 7516029 | 402634 | 20 |
| Barth+co Spedition SRL | 8602292 | -144555 | 8929570 | 9074125 | 2026496 | 19 |
| Andreikosman SRL | 8464773 | 1589813 | 9151071 | 7344486 | 761584 | 10 |
| First All Trans SRL | 8279854 | 90826 | 8967295 | 7933677 | 2953102 | 23 |
| Trans Petrica SRL | 8199787 | 31344 | 8398765 | 8354214 | 3127043 | 17 |
| Express Euro Duras SRL | 8188396 | 631658 | 8979005 | 8261549 | 413625 | 22 |
| Burciu Trans SRL | 8180852 | 207691 | 8446897 | 8185921 | 3354568 | 19 |
| Mitrofan SRL | 8054504 | 1687384 | 8651193 | 6681681 | 2708628 | 16 |
| Fares Import Export SRL | 8006293 | 105073 | 8232934 | 8106971 | 537131 | 50 |
| Emilema Prodcom SRL | 7903542 | 653165 | 8623449 | 7861798 | 1006832 | 26 |
| Grigman SRL | 7808483 | 444597 | 8001792 | 7488473 | 1900027 | 9 |
| Ciornei Prod SRL | 7805246 | 846544 | 7914252 | 6945226 | 18217 | 17 |
| Speed Bulk Logistics SRL | 7618341 | 346757 | 7670641 | 7268102 | 1985455 | 3 |
| Alon Trans SRL | 7548239 | 34916 | 7773552 | 7730843 | 2842102 | 10 |
| Lucrimase SRL | 7470716 | 43903 | 7687647 | 7643744 | 1305076 | 19 |
| Cosmos Niga SRL | 7430993 | -67366 | 7799882 | 7837180 | 3822245 | 18 |
| Holz-Transport SRL | 7424548 | 11373 | 8759002 | 8724747 | 5823435 | 15 |

| | | | | | | |
|--------------------------------|---------|---------|---------|---------|---------|----|
| Ago Trans Bolohan SRL | 7304137 | 432404 | 8065250 | 7566025 | 2419400 | 20 |
| Alertruk SRL | 7127183 | 1653948 | 7214768 | 5479109 | 1656891 | 11 |
| Adriana Voiaj SRL | 7036972 | 187033 | 7069010 | 6849920 | 1046147 | 23 |
| Ruta International SRL | 7001457 | 396897 | 7041363 | 6576318 | 1155417 | 17 |
| Ktrans Trk SRL | 6938486 | 511629 | 8709934 | 8121090 | 246983 | 20 |
| Trans Container Expedition SRL | 6901471 | 609172 | 8199034 | 7487365 | 404838 | 15 |
| Michael European Trans SRL | 6699827 | 658519 | 6995081 | 6246912 | 5263 | 11 |
| Express Eurodrav SRL | 6654327 | 102282 | 6916857 | 6778338 | 2033057 | 21 |
| Kol Trans SRL | 6503972 | 1496830 | 7156976 | 5401785 | 170352 | 10 |
| Loredana SRL | 6418026 | 864686 | 7608485 | 6590372 | 717108 | 25 |
| Superlativ Com SRL | 6355393 | 55623 | 6701111 | 6633136 | 2927977 | 19 |
| Ams Trans SRL | 6296964 | 27051 | 7594815 | 7549157 | 4111868 | 18 |
| Management Construct SRL | 6296499 | 424349 | 6333687 | 5818924 | 846131 | 18 |
| Bodo SRL | 6257713 | 646872 | 6520376 | 5767581 | 653605 | 10 |
| Alcarom SRL | 6240447 | 236568 | 7481421 | 7233440 | 3839049 | 28 |
| Euroday Cargo SRL | 6237794 | 882733 | 6239617 | 5281848 | 849532 | 4 |
| Tirelb SRL | 6074645 | 6317 | 6789324 | 6772357 | 3936026 | 17 |
| Darius Cons Truck SRL | 5984405 | 41407 | 6105703 | 5613062 | 832762 | 16 |
| Luxury Line SRL | 5954377 | 1310534 | 5975546 | 4435548 | 2119177 | 12 |
| Trans Europe Speed SRL | 5934864 | 1244436 | 5960571 | 4639641 | 1007820 | 9 |
| Iltrans SRL | 5917184 | 547609 | 5950556 | 5319209 | 759811 | 15 |
| Transsami SRL | 5885940 | 466028 | 6459502 | 5928671 | 912084 | 18 |
| Mastogaf SRL | 5880541 | 628905 | 6075054 | 5358803 | 991788 | 7 |
| Trans-Gmc SRL | 5761179 | 42055 | 5959946 | 5917050 | 1278766 | 12 |
| Bya & Edy Spedition SRL | 5553548 | 426148 | 5936362 | 5432378 | 1614357 | 6 |
| Tir Bucovina SRL | 5525862 | 8117 | 5841593 | 5739191 | 1746690 | 15 |

2. The research methodology

The research methodology we applied in the research paper has the following steps (figure 1):

- Step 1. Selection of indicators and recording of their values from the balance sheets for a sample of the top companies in the county, according to turnover.
- Step 2. Data cleaning by eliminating outliers and firms with high indicator values
- Step 3. Applying principal component analysis and identifying indicators that provide maximum information
- Step 4. Applying cluster analysis to divide the companies into distinct and homogeneous classes
- Step 5. Identifying the main differences in the classes determined in the previous step in 2020 compared to 2019.

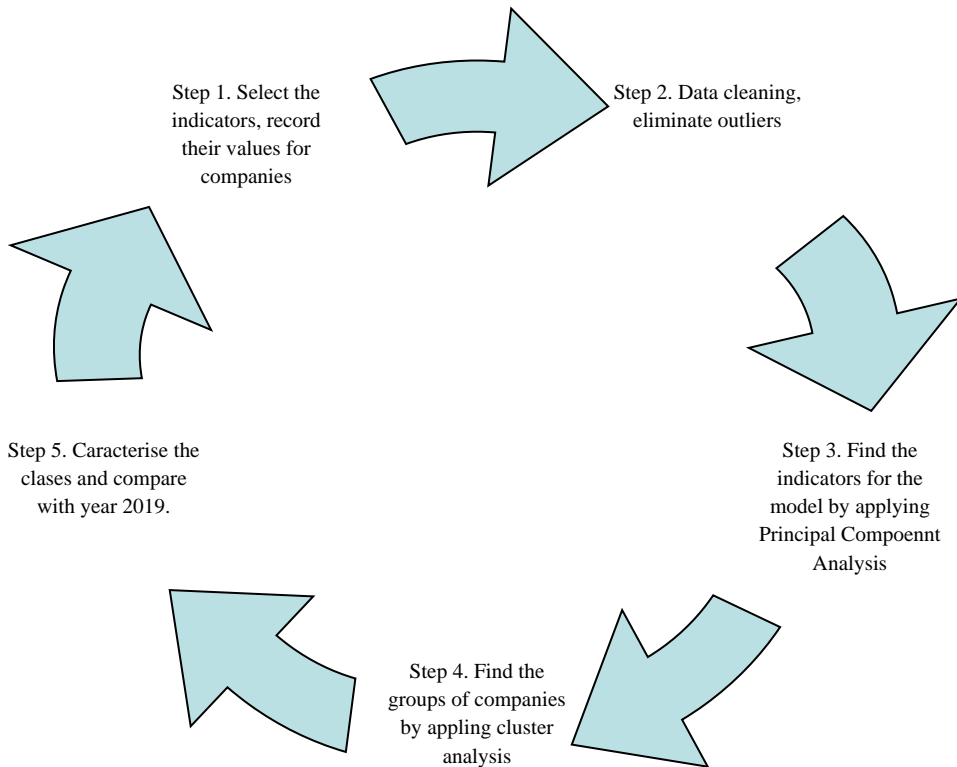


Figure 1. The stages of the research methodology

3. Results and discussions

Once the data sample has been prepared, an important step is to extract those indicators that yield the maximum information. To achieve this, the Principal Component Analysis algorithm must be applied. This algorithm involves identifying the covariance matrix (table 3), then determining the eigenvalues, ordering them, determining the eigenvectors and representing them in the plane, and finally further extracting those indicators that bring maximum information into the model.

Table 3. Covariance matrix

| | I1 | I2 | I3 | I4 | I5 | I6 |
|----|--------------|--------------|--------------|--------------|--------------|--------------|
| I1 | 1.9487 | 2.4969 | 2.1131 | 1.8265 | 4.2749 | 28584842.443 |
| I2 | 2.4969 | 997718525837 | 2.8504 | 1.7067 | 276396980982 | 2055318.0798 |
| I3 | 2.1131 | 2.8504 | 2.33558 | 2.0087 | 4.6858 | 33456651.899 |
| I4 | 1.8265 | 1.7067 | 2.0087 | 1.8139 | 4.3597 | 33184730.274 |
| I5 | 4.2749 | 276396980982 | 4.6858 | 4.3597 | 4.9578 | 10557306.264 |
| I6 | 28584842.443 | 2055318.0798 | 33456651.899 | 33184730.274 | 10557306.264 | 198.3145 |

For the covariance matrix we determine the eigenvalues, their number coinciding with the number of indicators. Further, as many eigenvalues will be retained

for which the error value should be at an acceptable minimum level. Thus, from Table 4 it can be seen that the first three eigenvalues yield 99.64% of the information, but a statistically acceptable solution is to accept only two eigenvalues, which will yield 97.79% of the information, thus losing 2.21% of the information, well below the maximum permissible error of 5%.

Table 4. Eigenvalues of the covariance matrix

| | Eigenvalue | Difference | Proportion | Cumulative |
|---|-------------------|-------------------|-------------------|-------------------|
| 1 | 6.15072*E13 | 5.75535*E13 | 0.9189 | 0.9189 |
| 2 | 3.95368*E12 | 2.71396*E12 | 0.0591 | 0.9779 |
| 3 | 1.23971*E12 | 1.00534*E12 | 0.0185 | 0.9964 |
| 4 | 2.34376*E11 | 2.30554*E11 | 0.0035 | 0.9999 |
| 5 | 3821750408 | 3821750295 | 0.0001 | 1.0000 |
| 6 | 113.0144 | | 0.0000 | 1.0000 |

An even better representation of the amount of information added by each eigenvalue is shown in the graph in Figure 2. Thus, the first two eigenvalues bring the maximum amount of information, so they will remain further in the analysis. The more new eigenvalues are added, the less information is retrieved and the more complex the model becomes.

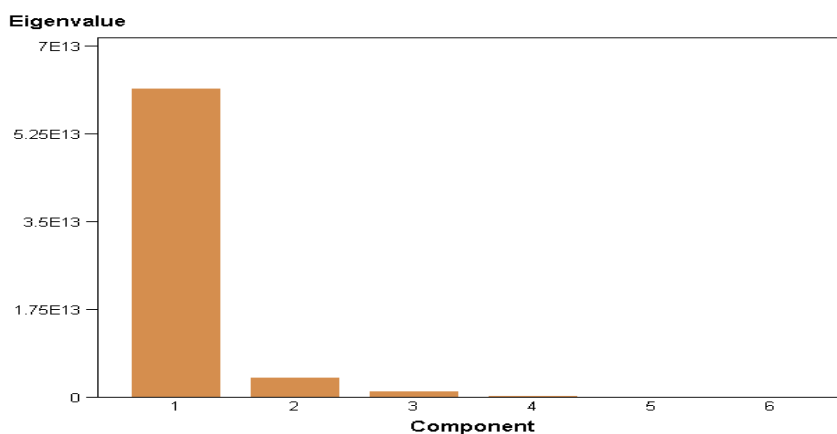


Figure 2. The eigenvalues chart

Next, the eigenvectors for each main component will be determined (Table 5) and represented in the plane of those components that bring maximum information, in this case we are talking about the first two components: PRIN1 and PRIN2 (Figure 3).

Table 5. Eigenvectors for componentele principale

| | PRIN1 | PRIN2 | PRIN3 | PRIN4 | PRIN5 | PRIN6 |
|----|--------------|--------------|--------------|--------------|--------------|--------------|
| I1 | 0.559472 | -0.101252 | 0.186937 | -0.801099 | 0.005803 | 0.00001 |
| I2 | 0.067739 | -0.102339 | 0.729429 | 0.235023 | 0.630583 | 0.00001 |
| I3 | 0.613817 | -0.113678 | 0.244298 | 0.496055 | -0.551864 | -0.00001 |
| I4 | 0.536148 | 0.001538 | -0.598194 | 0.238605 | 0.545687 | 0.00000 |
| I5 | 0.134821 | 0.983031 | 0.124379 | -0.001055 | 0.001573 | -0.00000 |
| I6 | 0.000001 | 0.000001 | -0.000004 | 0.000007 | -0.000011 | 1.00000 |

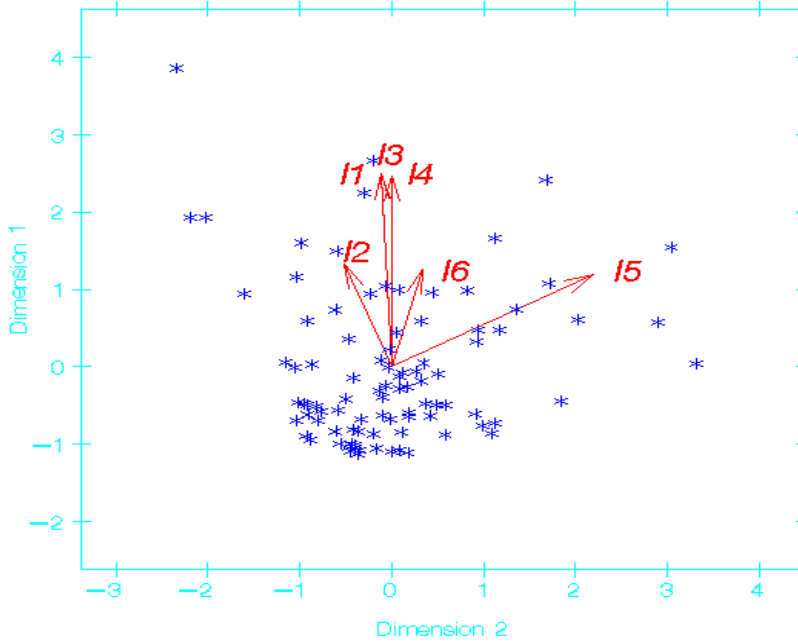


Figure 3. The eigenvectors plotted according to the first two principal components

So, in accordance with the graph in Figure 3, the maximum information is provided by indicators I2, I6, I5 and I1, and, further on, the classification of the companies will be made on the basis of these indicators only.

After extracting the indicators that bring the maximum information into the model, the next step in the proposed research methodology is to perform the cluster analysis. This involves first of all obtaining knowledge about the distribution of the data series: whether the series are close to the normal distribution or not, whether they have higher or lower tails in a certain direction, etc. (Table 6).

Table 6. The descriptive statistics for the indicators according to which companies will be classified

| Variable | Mean | Std. Dev. | Skewness | Kurtosis | Bimodality |
|----------|----------|-----------|----------|----------|------------|
| I1 | 10365362 | 4414363 | 1.4804 | 2.6269 | 0.5572 |
| I2 | 880558 | 998859 | 2.2240 | 6.4537 | 0.6223 |
| I5 | 2752500 | 2226614 | 1.4646 | 1.8534 | 0.576 |
| I6 | 23.2826 | 14.0824 | 1.2583 | 2.2216 | 0.4853 |

The cluster analysis aims to group the sample of companies according to the choice of the classification algorithm and well established criteria. Thus, further on we have chosen Ward's classification algorithm which involves calculating the distance between an object and the centroid of each of the classes. The object will be assigned to the class where this distance will be minimum. The same will be done with the other objects in the sampling of enterprises. Finally, an aggregation graph will result (figure 4) and, depending on the assumed error, the classes will be delimited.

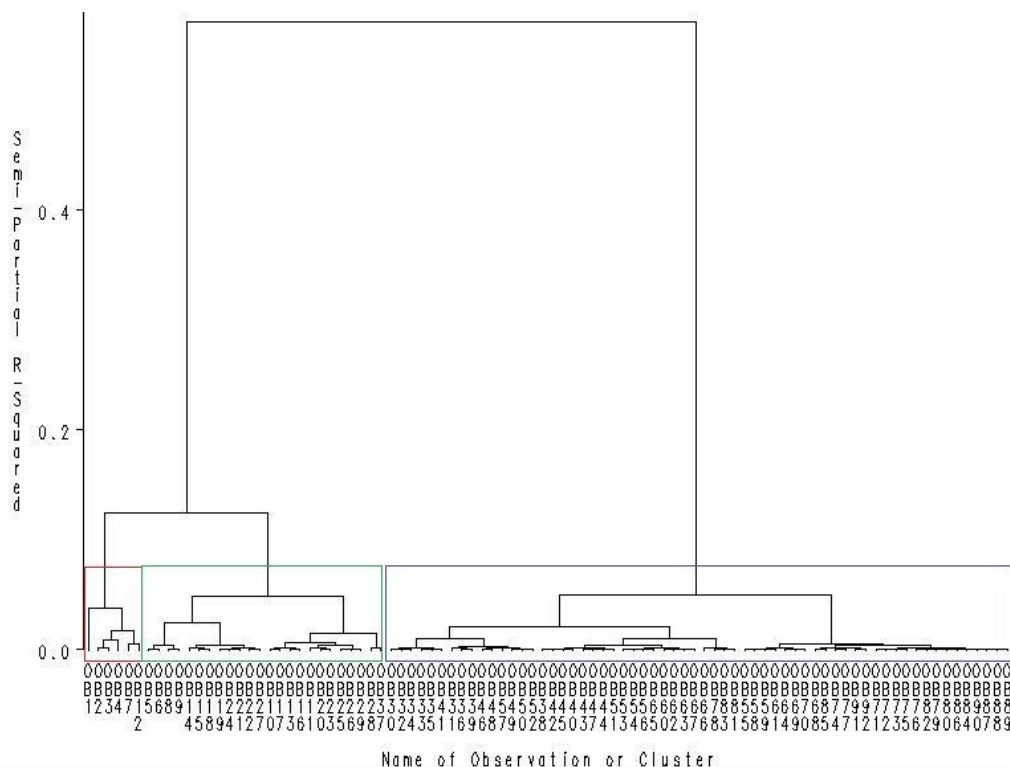


Figure 4. The dendrogram resulting from the analysis

If the dendrogram in Figure 3 is sectioned at the 0.4 level of the Oy axis, then two rather inhomogeneous classes will result. If, on the other hand, it is sectioned at the 0.05 level or less, then classes with small distances between them will be quite close. If the cut is made at a level close to 0.1, then three fairly homogeneous, well-defined classes will result, with elements quite far apart. Thus, the three classes are:

- class 1: Romoldova SRL, Stinav SRL, Stidanpet Trans SRL, Soldori Trans SRL, Iltioi Transport SRL, Ac Mobile SRL
- class 2: Alpha Cargo Expres SRL, Trans Zamfir SRL, Florian Bruder Trans SRL, Tgg Service Trans SRL, Constantin Pas SRL, Pap Trans SRL, M-System SRL, Every Day Prod-Com SRL, Truk-Ierbac SRL, CorneTrans SRL, Ovi Vali SRL, Stehlmann Trans SRL, Tolpost SRL, Cupola Comserv SRL, Way Farer Trans SRL, Torsen-Sim SRL, Elidora SRL, Marpas SRL, Euro Vasilas SRL, Mihai-Luca Trans SRL, Hlihor Trans Com SRL, Labirint-Com SRL, Adm Expres Group SRL, Trans Luky SRL.
- class 3: Profisped SRL, Saturn SRL, Farlan Trans SRL, Ripac Professional SRL, Euro Milex Group SRL, Deli Trans SRL, United Euro Spedition SRL, Vasy Bol Cargo SRL, European Tractioner Specialist SRL, Helios Car SRL, King Com Trans Internațional SRL, Pitar SRL, Demetris SRL, Seb Cargo SRL, Nord Spedition SRL, Mirinec SRL,

Johandav SRL, Pro Via Express SRL, Benoni Speed SRL, Beniberti SRL, Barth+co Spedition SRL, Andreikosman SRL, First All Trans SRL, Trans Petrica SRL, Express Euro Duras SRL, Burciu Trans SRL, Mitrofan SRL, Fares Import Export SRL, Emilema Prodcum SRL, Grigman SRL, Ciornei Prod SRL, Speed Bulk Logistics SRL, Alon Trans SRL, Lucrimase SRL, Cosmos Niga SRL, Holz-Transport SRL, Ago Trans Bolohan SRL, Alertruk SRL, Adriana Voiaj SRL, Ruta International SRL, Ktrans Trk SRL, Trans Container Expedition SRL, Michael European Trans SRL, Express Eurodrav SRL, Kol Trans SRL, Loredana SRL, Superlativ Com SRL, Ams Trans SRL, Management Construct SRL, Bodo SRL, Alcarom SRL, Euroday Cargo SRL, Tirelb SRL, Darius Cons Truck SRL, Luxury Line SRL, Trans Europe Speed SRL, Itrans SRL, Transsami SRL, Mastogaf SRL, Trans-Gmc SRL, Bya & Edy Spedition SRL, Tir Bucovina SRL.

Class 1 is represented by large companies, with notoriety in the transport sector in Suceava county and, implicitly, with high profitability. Thus, the average turnover in this class, for the year 2020, has an average value of 21 million RON, the average profit of 3.2 million RON, the debts of 6.4 million RON and the average number of employees of about 33 (table 7).

Class 2 is composed by more medium-sized transport companies, with an average turnover of 14.1 billion ron, a net profit lower than class 1, of 0.85 billion ron on average, debts of 4.05 billion ron, and an average number of employees of 34 (table 7).

Class 3 is mainly composed of small companies with low profitability, so the average turnover in this group is 7.88 million RON, the net profit is 0.66 million RON, the average debt is 1.89 million RON while the average number of employees is 18 (Table 7).

Table 7. Aggregated indicators at class level, calculated in 2019 and 2020

| | | 2019 | | | | 2020 | | | |
|---------|---------|-------------|-----------|------------|-------|-------------|-----------|------------|-------|
| | | I1 | I2 | I5 | I6 | I1 | I2 | I5 | I6 |
| Class 1 | minim | 8838289 | 4795 | 1005283 | 2 | 15006747 | 44142 | 2403227 | 3 |
| | maxim | 21555741 | 964828 | 10538041 | 63 | 28469846 | 5553556 | 10494006 | 53 |
| | average | 13220634.33 | 235198.67 | 6232597.5 | 33 | 21037558.5 | 3261824.5 | 6488789.33 | 32.83 |
| Class 2 | minim | 4919420 | -66614 | 1122147 | 6 | 10203065 | 60817 | 381241 | 0 |
| | maxim | 24090496 | 1703534 | 9519161 | 82 | 18937987 | 2157556 | 9395528 | 77 |
| | average | 13308957.88 | 373759.21 | 4325101.08 | 35.87 | 14115212.04 | 847322 | 4049909.92 | 33.67 |
| Class 3 | minim | 2768152 | -13084 | 11421 | 0 | 5525862 | -144555 | 5263 | 3 |
| | maxim | 15131516 | 1986423 | 6883431 | 46 | 11494295 | 2978020 | 5823435 | 50 |
| | average | 7354732.71 | 362164.02 | 1956045.24 | 17.77 | 7881014.03 | 662979.02 | 1888699.68 | 18.34 |

In order to highlight the impact of the Covid-19 pandemic in Suceava county, we have to apply the classification algorithm for the data recorded in 2019, having the same sample of companies and the same indicators resulting from the analysis of the main components. Following its application, the structure of the groups has not changed, the only changes are on the aggregated indicators calculated at group level. Thus, some indicators have increased compared to the previous year, others have lower values (Table 7).

Table 8. The absolute and the relative changes of the aggregated indicators at the level of each class

| | | 2020 - 2019 | | | | 2020 / 2019 | | | |
|---------|---------|-------------|-------------|-------------|-------------|-------------|---------|--------|--------|
| | | $\Delta I1$ | $\Delta I2$ | $\Delta I5$ | $\Delta I6$ | i1 | i2 | i5 | i6 |
| Class 1 | minim | 6168458 | 39347 | 1397944 | 1 | 69.79 | 820.58 | 139.06 | 50 |
| | maxim | 6914105 | 4588728 | -44035 | -10 | 32.08 | 475.6 | -0.42 | -15.87 |
| | average | 7816924.17 | 3026625.83 | 256191.83 | -0.17 | 59.13 | 1286.84 | 4.11 | -0.52 |
| Class 2 | minim | 5283645 | 127431 | -740906 | -6 | 107.4 | -191.3 | -66.03 | -100 |
| | maxim | -5152509 | 454022 | -123633 | -5 | -21.39 | 26.65 | -1.3 | -6.1 |
| | average | 806254.17 | 473562.79 | -275191.16 | -2.21 | 6.06 | 126.7 | -6.36 | -6.15 |
| Class 3 | minim | 2757710 | -131471 | -6158 | 3 | 99.62 | 1004.82 | -53.92 | ---- |
| | maxim | -3637221 | 991597 | -1059996 | 4 | -24.04 | 49.92 | -15.4 | 8.7 |
| | average | 526281.32 | 300815 | -67345.56 | 0.57 | 7.16 | 83.06 | -3.44 | 3.21 |

For class 1, compared to 2019 the average turnover increased by 7.8 million RON, the average profit increased by 0.3 million RON, the debts, in turn, increased by 0.26 million RON and the average number of employees is slightly decreasing. For this class the pandemic has been beneficial because, although turnover has increased by 59% on average, net profit has increased almost 13 times compared to the previous year, although debts have decreased by 4 percent and the average number of employees has also decreased by 0.52% (table 8).

For Class 2, compared to 2019, turnover increased by an average of 6.06 percent, net profit increased by almost 1.3 times, debt decreased by 6.36 percent and the average number of employees decreased by more than 6 percent.

The third class has somewhat maintained this trend, so the turnover has increased on average by percent, the profit by 83%, the debts have decreased and the average number of employees has increased by 3.21 percentage points.

Comparing 2019, when there was no pandemic situation, with 2020, the year when the number of Sars-Cov-2 infections exploded, it can be seen that activity in the road freight transport sector has developed within normal limits, on average. It is understandable that some companies have had a better or worse evolution, depending on market demand, contracts with suppliers, customers, etc.

4. Conclusion

Considering the two years in general, it can be concluded that although the pandemic had a major impact on all economic and social activities all over the world, in the end people adapted their actions so that they could live a life as close to normal as possible. The study conducted can be improved by using other specific data mining techniques, such as training a classification neural network, Markov chains, even applying elements of genetics such as genetic algorithms, in order to minimize the error assumed from the realization of the three classes. Another limitation is that the study is carried out at the level of a county, which is quite difficult to issue theories, policies, conclusions at the level of a region or even the whole country. As a future research we propose to extend this investigation to the Romanian level and to compare the results found with studies performed in this field in other European countries.

Looking at the two years as a whole, it can be concluded that although the pandemic had a major impact on all economic and social activities all over the world, in the end people adapted their actions so that they could lead a life as close to normal as possible.

Considering the radical road transport disruptions experienced during the COVID-19 pandemic [15], the enormous disruption to the everyday life of the modern society [16], the e-commerce growth, the facilities using electric vehicles growth [17] and the regional impact, according to the analysis made above in the present study, in future disruptive events, the guidelines are outlined around areas that present, economically, socially and medically huge downturns, in order to have the ability to protect the areas in close proximity to be affected or to limit the extent of damage and increased operational costs.

Absolutely no sector of the economy has remained unaffected by the long arm of this pandemic. Moreover, starting from the impact on road freight transport, as a result of the medical crisis and the increases in operational costs as noted in the analysis above, the other sectors of activity have been faced with major increases in transport costs and thus higher product prices. The primary impact has been inaccessibility to consumer goods of a certain type or purchased through certain types of distribution channels. The global impact is that we are seeing changes in warehouse configurations, developing replenishment areas closer to end consumers to reduce the distances that cars loaded with goods for road transport travel every day. E-commerce has drastically educated the market in this respect, with the location of easyboxes extremely close to end consumers, delivery to them in urban areas is almost exclusively done by electric cars to support the reduction of emissions of the main greenhouse gases (GHG: CO₂, CH₄, and N₂O) and other pollutants (NO_x, CO, NMVOC, SO₂, PM₁₀, PM_{2.5}, and BC). From this point of view, road haulage companies reduce their costs but also increase their eligibility percentage in contracting new collaborations due to their pro-environment support image. Companies in the other sectors, being very conscious of their carbon footprint on the environment and the fact that final consumers now want their purchases to be as pro-environmentally supportive as possible, are turning to predominantly electric road freight transport for the public infrastructure that allows it.

Clustering of companies is extremely important to apply practices that other companies in the same class have successfully applied in other regional areas, and also to avoid practices that have led to the closure of other companies. Monitoring of companies in the same class should be part of the regular operational procedure, also following the example of disruptive events such as the global COVID-19 pandemic, inter and intra-company collaboration and public-private partnership should be promoted and supported.

In addition to the accessibility to general goods that unconditional road transport of general and special temperature-controlled, temperature-controlled, sterile goods transports for hospitals, taken over by truck FTL, LTL, van, bus, trailer, ambulance, personal cars, by any means of the goods supply, keeping operating costs under control and profitability at company level makes the difference in an efficient post-crisis recovery, at regional level. The application of exit policies and strategies that are tailored to the specific area and company in the region is particularly important for successful outcomes and reducing recovery time and getting back on track with a beneficial social, economic and environmental impact.

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