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## EDITORIAL

Finishing nine years of regular bi-annual publishing, our Journal of Economic and Social Development changes the focus to a resilient society's specific field. Our generation remembers the expectations towards economic and technical development at the end of the 20th Century, as a result of huge scientific improvements. However, there were no improvements in social life and general well-being. When we seek a new form of regulating the most relevant processes in the modern world, we must face the problems that resulted from our irresponsible behavior in the past. Climate changes, hunger, even pandemic threats, and war, are the most dangerous phenomenon in recent economic and social life. In this issue, authors of selected papers come from different economic and social environments and have different backgrounds as well as various academic education. That diversity is an excellent foundation for exciting articles in the post-covid society, threatened by war. We hope that readers will recognize the values promoted by the Journal and support its development. Together we can help the Resilient Society, Journal of Economic and Social Development, grow in quality and academic standards.

The Editor,  
Marijan Cingula

# The guaranteed minimum income in Romania - Tool to support resilience to poverty and increase social inclusion & employment among beneficiaries

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## **ABSTRACT**

*The guaranteed minimum income GMI is a recognized tool in practice of reducing poverty and its severe and extreme forms among people facing this social risk. In order to ensure the guaranteed minimum income necessary to cover the needs of persons who are at a certain moment unable to ensure a minimum subsistence, a social aid is granted in addition to the monthly net income of the family or the single person. The purpose of this program was to provide some form of social assistance to these people in difficulty, who have very low incomes or even no incomes. The guaranteed minimum income is thus the most important measure taken into action to reduce poverty and social exclusion, which has a major impact on the existence of the most vulnerable people affected by this social risk. On the other hand, the program aims to increase participation of the recipients in the labour market, by containing certain activation components. Over time, it has been proven that these activation elements are not sufficiently stimulating to mobilize beneficiaries of social aid to transition from their social assistance state to labour market participant (with reference to the activable persons, respectively the working-age people with work capacity). For this reason, more acutely, the guaranteed minimum income is increasingly seen as an incentive tool to encourage work among activable recipients. Thus, the program is aimed at stimulation the social aid beneficiaries in their transition into employment and to get out of the social assistance network. In this sense, one solution is to insert more stimulating activation elements in the GMI program, which would support poverty alleviation among these people and families and increase their level of well-being. The paper considers an ex-ante evaluation of the introduction in the guaranteed minimum income program of an incentive to work, more active than the present one, and to estimate some effects that this simulation of introducing a pro-active work incentive in the social aid could have in contributing to poverty alleviation.*

**Keywords:** *Indicators, Ex-ante evaluation, Guaranteed Minimum Income, Poverty, Simulation*

## **1. INTERNATIONAL STRATEGIC CONTEXT**

Reducing poverty and increasing employment take different forms and facets and still represent major challenges, current and future of the European Union, but also at national level. In order to achieve this target, the European and national strategies have set out major goals along strategic time horizons. Many international strategic documents deal with the two important socio-economic dimensions, namely poverty reduction and employment growth. *The Millennium Development Goals Report (2003)*, prepared following the Millennium Declaration, set a number of specific targets for the period 2009-2015, in critical areas of development, and poverty reduction was a key strategic goal, with 5 direct and indirect targets. In the period 2000-2015, the Millennium Declaration was the only global development agenda with an agreement at the highest level, which included precise targets aimed mainly at reducing poverty.

Subsequently, the *Lisbon Agenda (2000-2010)* took an important step in building a competitive and dynamic European knowledge-based economy, by ensuring more jobs and greater social cohesion (growth, stability, cohesion), and two of the key strategic objectives were based on the employment component, but also on the poverty reduction. Then, the *Europe 2020 Agenda (2010-2020)* took over and further promoted these major objectives, namely the creation of a comprehensive labour market, but also the increase of social inclusion. In line with 4 major priorities, the 2020 Strategy focused on the social inclusion increasing through two initiatives, namely: an Agenda for new skills and jobs and a European Platform against poverty. This Platform aims to ensure economic, social and territorial cohesion; to guarantee respect for the fundamental rights of people affected by poverty and social exclusion and to ensure that they live in dignity and play an active role in society; and to support measures that promote community integration, vocational training and integration and access to social protection. A central concern of contemporary society, with all its components (institutional, academic environment, civil society, the private sector) the issue of poverty reduction is reflected in all priority strategies at global level. Since June 2017, with the adoption of the EU Council conclusions, efforts have focused on a sustainable future for Europe, with the EU's response to the *2030 Agenda for Sustainable Development*. The 2030 Agenda for Sustainable Development contains a set of 17 global goals, the first being: "No Poverty - Eradicating Poverty in All Its Forms and in All Contexts". In addition, after the 19 Covid pandemic, a comprehensive approach was thought to implement the UN's 2030 Agenda for Sustainable Development - a more thorough reconstruction after the effects of the global pandemic crisis (Council European Union, 2021). Ensuring a dignified and prosperous life for all citizens, pursued by the 2030 Agenda, implies for the coming years, reducing the high poverty risk and promoting the social inclusion. This can only be achieved by "integrating the three dimensions of sustainable development, namely economic, social and environmental, into a climate of peace, security and justice for all", as mentioned in the 2030 Agenda. In order to achieve these goals, the activity of the European institutions will be coordinated through the *New Strategic Agenda for 2019-2024 period* of the European Council, which sets out the new ways to implement political priorities. This New EU Strategic Agenda 2019-2024 outlines the European model for the future, imposing "the renewal of the basis for long-term sustainable and inclusive growth and strengthen cohesion in the EU. This can only be achieved by developing a strong economic base that is of key importance for Europe's competitiveness, prosperity and role on the global stage and for the creation of jobs" (European Council, 2019). As the multiple differences between generations, as well as territorial and educational, are now widening, generating poverty and social exclusion, polarities, economic and social inequalities, the European Pillar of Social Rights must be implemented, which implies further attention to social issues that still gravitate toward poverty alleviation. At the same time, the EU Council has summited to the attention the draft conclusions on the welfare economy (October 17, 2019), noting that "the welfare economy is a strategic orientation and approach to governance that seeks to place people and their well-being at the core of policy-making and of the decision-making process. While people's well-being is a value in itself, the welfare economy emphasizes the relationship of mutual consolidation between well-being and economic growth". Therefore, the new approaches to the *EU's New Agenda for 2019-2024*, as well as the *UN's 2030 Agenda for Sustainable Development*, strengthen and renew commitments to reduce poverty and social exclusion, to promote social inclusion and cohesion, and to increase the quality of life.

## 2. NATIONAL STRATEGIC CONTEXT

In this European context, Romania aimed to reduce by at least 580,000 the number of people with risk of poverty and social exclusion, since the implementation of the *National Strategy on Social Inclusion and Poverty Reduction for the period 2015-2020* and the Strategic Action Plan 2015-2020 (GD no. 383/2015). Other national strategies also aim to reduce poverty and associated severe and extreme forms. Thus, the *National Strategy for Sustainable Development - Horizons 2013-2020-2030* (GD no. 1460/2008) presents as target objectives and way of action during these years, according to the EU strategic guidelines, the following: \*for Horizon 2020 - the main objective was to ensure an



integrated approach to the active inclusion of disadvantaged groups, by combining personalized assistance measures in communities with labour market integration actions, and \*with regard to Horizon 2030 - the main objective is to reduce the poverty incidence to a level comparable to the EU average. For the present and next period, reference is made to the *National Strategy on Social Inclusion and Poverty Reduction for the period 2021-2027*, which reflects the progress achieved through the implementation of the previous strategy in the field (the National Strategy on Social Inclusion and Poverty Reduction for 2015-2020). This New Strategy covering the 2021-2027 period contributes to improving the still persistent deficits and marks a turning point in national strategic thinking, promoting “a new model of governance in the field based on intensifying solidarity, constructive cooperation and shared responsibility of all actors engaged in ensuring cohesion and social progress and for whom public-private collaboration is a key element”. The overall objective of this New 2021-2027 National Strategy is to reduce the number of people at risk of poverty or social exclusion by at least 7% compare with 2020. The Strategy addresses measures to poverty alleviation, the right to social assistance, access to services of general public interest, opportunity for social and economic participation of vulnerable groups, in terms of respect the human rights, and also provides for recovery and resilience measures in the social services system in the context of the Covid 19 or other special situations. According to the National Strategy for Social Inclusion and Poverty Reduction 2021-2027, the aim of the strategic objective is to ensure a decent living for all and to combat transitional situations of poverty, so that they do not turn into structural problems of poverty and social exclusion. According to the Semester Country Report 2018, Romania has already reached the assumed target of reducing the number of people exposed to the risk of poverty and social exclusion (European Semester 2018, pp. 1). Although Romania has reached its target of reducing the risk of poverty and social exclusion, by 580 thousand people, the Semester Country Report 2018 highlights an alarming increase of poverty, especially among vulnerable groups (children, young people, etc.) who have often faced the highest poverty incidences (European Semester 2018, pp. 35). These categories vulnerable to poverty (young people, families with children, Roma, disabled, rural population, inactive people, etc.) are also mentioned in the previous Semester Report 2017. Also, marginalized rural communities are targeted, as here are the largest “pockets of poverty” concentrated mainly in the North-East area of the country, HH cluster areas / High High (Lincaru et al., 2018, Fig. 3. Map 1, pp. 740), associated with other phenomena (low wages, low number of employees, large number of unemployed, large number of GMI recipients, depopulation, ageing, few jobs, poverty, migration, and so on). Thus, even if the upward trend of poverty has been reversed, however, as assessed in the European Semester Report 2018, poverty still reaches high values, and new exogenous shocks such as the Covid pandemic, as well the economic and social effects triggered by the recent armed conflict generated near the country's borders will be felt acutely, on short term especially by the poor people and the vulnerable who were not poor until now. As a result, these poor people will have to strengthen their resilience to such to shocks and social risks, together with the support from the state. This dynamic, enhanced by recent world events, requires rethinking strategic objectives, as these shocks will slow progress towards poverty alleviation, they will fuel precariousness, and will intensify the tensions faced by social assistance systems, thus multiplying the need for adequate, coherent, effective and efficient social programs.

### **3. BRIEF REMARKS REGARDING POVERTY AND GMI FROM THE LITERATURE**

The pulse of poverty in Romania is constantly being taken and numerous studies and reports support this research. Constant concerns with central theme of the poverty approach are also those of the World Bank, which focused on poverty in Romania. Thus, the 2003 Report (World Bank, 2003) analysed the profile of poverty and the link between social assistance and poverty benefits, the coverage degree of these programs, and also assessed the impact of social benefits on the poverty incidence (a previous analysis was conducted in 1997). Since that time, the issue has been raised to extend the GMI program, but also to improve its targeting, coverage and adequacy to support in a better way the vulnerable segments of the population facing the risk of poverty and social exclusion. Another Report conducted in 2007 was a program of analytical assistance and counselling, focused

on poverty and economic growth in Romania (World Bank, 2007). The next Report 2015 was established as a foundation study for the National Strategy on Social Inclusion and Poverty Reduction for the period 2015-2020 (World Bank, 2015). Other impact studies were carried out on the measures regarding the guaranteed minimum income, and one of them estimated this impact at the level of 2011 and 2012 (Ministry of Labour, Family and Social Protection, 2012). Even though the study is not so recent, it presented an iteration at a certain moment and an alarm signal that a more sustained effort is needed to boost social aid recipients to transition into employment. Another study, conducted under the aegis of the Government, which considered the socio-economic analysis for the programming of European funds 2014-2020 (Ministry of Labour, Family, Social Protection and the Elderly\*, 2014), analysed the GMI program and its impact on poverty reduction, noting that "GMI beneficiaries remain among indecently low-income citizens, who almost one in three live in absolute poverty even after receiving social aid" (\*Ministry of Labour, Family and Social Protection / Ministry of Labour, Family, Social Protection and the Elderly is currently the Ministry of Labour and Social Protection – the institution has changed its name over time). A European Commission study focused on guaranteed minimum income schemes implemented in many countries. The comparative analysis of the main features of these schemes for the countries studied panel concluded that these GMI schemes across Europe play a particularly important role in reducing poverty and social exclusion (European Commission, 2015). Other studies have analysed the GMI program in Romania and determined the poverty rates before and after social transfers, assessing the adequacy of the GMI level, as well as the effectiveness of this program in reducing poverty (Radu, 2009, Stroe et al., 2011). A similar focus is given to analyses of the anti-poverty impact of national social assistance programs, and the results indicated that "social assistance programmes achieve only limited poverty reduction, while spending a significant amount of their resources on the non-poor. The more extensive and generous programmes achieve higher effectiveness in reducing poverty" (Avram, 2016). The distributional effects of policy changes, often implemented to deal with emerging situations, have been compared to other countries (Avram et al., 2013). Also, other studies highlighted the impact of in-work benefits on work incentives and poverty (Vandelannoote, Verbist, 2020), by using EUROMOD simulation models, or focused for some segment of the population, as youth (Vergnat, 2019) or family with children (Avram, Militaru, 2016), etc. Analyses at the national level have been extended to income and inequality and highlighted that "social benefits are in favour of inequality reduction (...), the results being sensitive to social and fiscal policy changes" (Militaru, 2015). Thus, analyses of social benefits, with an impact on income changes and inequalities, but also on the incidence of poverty, are carried out frequently at national and international comparative level of European countries, and literature abounds in such studies and research, especially against the background of finding solutions that will contribute to the reduction of poverty among the vulnerable.

#### **4. EX-ANTE IMPACT EVALUATION OF GMI ON POVERTY INCIDENCE**

Over a decade and a half, the trend of poverty has been increasing, even though they have alternated periods of increasing with those of decreasing of its incidence.

##### **4.1. Risk of poverty – although declining since 2015, it remains at high values**

In contrast, starting with the period 2014-2016 when the highest poverty thresholds of over 25% were reached, in the following period the trend is a decreasing one, thanks to the national strategies implemented in order to reduce poverty. Thus, poverty has decreased since 2015 from 25.4% to 23.4% in 2020, so by 2 percentage points. Although at first view, the decrease would seem particularly small, this value of 2 percentage points means a lot in terms of progressivity in a relatively short period. This indicates a significant decrease in poverty rate, as mentioned in the European Semester Report 2018 (even if in the Report, the indicator referred to the risk of poverty and social exclusion, which has decreased since 2015 from 44.6% to 38.9% in 2018 and with a more significant rate of decline then, to 35.8% in 2020). Although 2020 was a pandemic year, the slight improvement in the incidence of poverty, even by 0.4 percentage points, came amid slight increases in income (increase of the average income and also of the minimum gross wage in the economy) and special



measures taken by the state to support employment in the context of the pandemic Covid 19 (measures such as technical unemployment, or reduced work / `Kurzarbeit`).

#### 4.2. Simulation of the poverty rates – impact of the Guaranteed Minimum Income GMI

The assessment of the contribution of the guaranteed minimum income to poverty reduction was carried out using the EUROMOD microsimulation model. In order to highlight the impact on poverty of the guaranteed minimum income, the poverty rates were simulated in absence of the social aid program, in order to see how much the lack of this social benefit would influence.

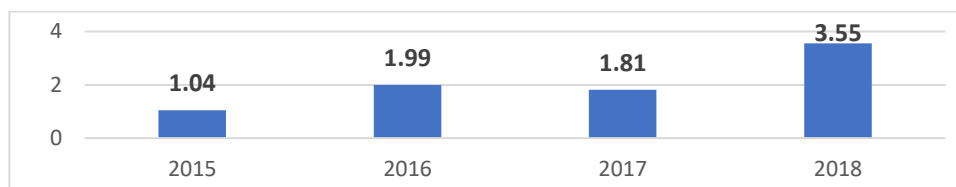


Figure 1. Percentage changes in the poverty rate, recorded versus simulated, total population  
(Source: estimates based on EU-SILC data and the EUROMOD model)

At the level of the total population, the difference between the registered poverty rate and the simulated one in the absence of the GMI shows the largest discrepancy achieved in 2018, being 3.55%, and the lowest in 2015, of 1.04%. The relatively low values are explained by the fact that in total disposable income, social aid, as well as other social assistance benefits, have a particularly low share in income from social transfers (significant weights are pensions, e.g., 85.9% is the share of pensions in income from social benefits in 2018, according to NIS, 2019).

It is therefore noted that the effects are not uniform, even if there have been no major changes in the conditions of granting and the levels of guaranteed minimum income, that would justify this increase in 2018 compared to previous years. The differences are related to the relative situation of the beneficiaries of the guaranteed minimum income compared to the poverty threshold, but also to their representation in the sample of the survey (EU-SILC survey was the basis for processing using the EUROMOD microsimulation model).

#### 4.3. Simulation of poverty rates – impact of the GMI that contains a new work-incentive

Currently, the Law on GMI includes the provision “Single families and persons with monthly net income up to the level of the guaranteed minimum income, benefit from a 15% increase in the amount of social aid per household, if at least one family member proves that he works on the basis of an individual employment contract or civil service agreement” (art. 6 of Law no. 416/2001 of the guaranteed minimum income, with subsequent amendments and completions). However, as can be seen in the figure above, the poverty rates in the presence, but also in the absence of this social aid benefit do not offer a significant reduction in the poverty rate. The differences are put especially on the relative position of the recipients against the poverty threshold (with social aid and without this social benefit, these people were also found in the poverty network), or on the representation of these beneficiaries in the sample of the EU-SILC survey that was the basis of the simulation model (a small number of cases). For simulation, for a new approach and a new pro-active element into the GMI program, we start from the provision contained in the Law on the inclusion minimum income, which has not yet come into force (it is estimated in the third quarter of 2023). The Law states that “to stimulate an active life and participation in the labour market, in case that one or more family members earn income based on an individual employment contract, employment relationship or other legal form of employment, or family members are self-employed or carry out an agricultural activity, 50% of all of their incomes, but not more than 400 lei per family, shall not be taken into account in determining the monthly net income of the family” (art. 11 of Law no. 196/2016 on the inclusion minimum income). The present paper does not take into account the 50% threshold, but a lower one (respectively a 35%) and simulate the poverty rate in the case of this new insertion of work-incentive in the guaranteed minimum income (a lower threshold implies a lower financial effort, in the

conditions of current budgetary constraints). To assess the GMI impact on the incidence of poverty, the main tool used is to simulate poverty rates, under certain conditions, when or not is taken into account the newly inserted pro-active co-ordinate in the disposable income. Scenarios have been developed to change amounts within available income, on the basis of which some changes in poverty rate have been made. The model could also capture the budgetary effort that this hypothetical change could entail.

### Scenario for the simulation exercise of the Guaranteed Minimum Income GMI

<b>Basic Scenario</b>	Guaranteed minimum income as it is in force (and as it was at the time of the simulations, November 2019, together with the available statistical data) includes the facility to supplement with 15% the level of social aid for households with employed people ( <i>in force in this moment</i> ).
<b>Alternative Scenario</b>	In addition, an activation component (work-incentive) is included, according to which 35% of the income obtained as wages are not taken into account when determining the net income per household member for GMI eligibility testing ( <i>simulation / ex-ante poverty impact exercise</i> ). At the same time, the facility to increase the level of social aid by 15% for households with employed persons is eliminated in the simulation.

The hypothesis envisaged in the Alternative scenario implies a change in the philosophy of the program, in the sense that currently the social aid is supplemented by 15% if a member has a job, and in the simulation exercise, 35% of the household incomes are not taken into account when determining eligibility for GMI test. This new incentive is a proactive one, encouraging employment and earning an income from work, and simultaneously receiving social aid.

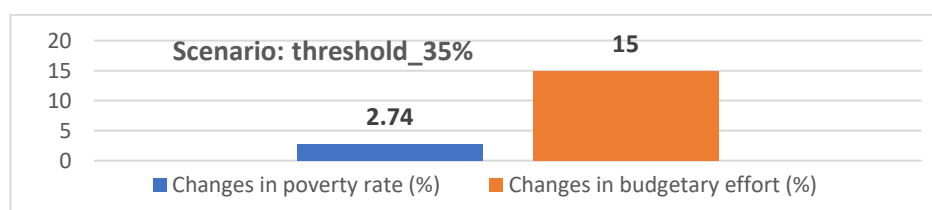


Figure 2. Percentage changes in the poverty rate, recorded versus simulated with 35% threshold  
(Source: estimates based on EU-SILC data and the EUROMOD model)

Regarding the Alternative Scenario, when an activation component is included within the GMI according to which 35% of the household incomes are not taken into account in the determination of the net income per family member for GMI testing of eligibility, the simulations carried out using the EUROMOD model showed the following at national level:

- this change with work-incentive component within the GMI program would influence poverty in the total population in a proportion of 2.74% and
- this change with work-incentive component into the GMI program would involve a change in budget expenditures by 15% (budgetary effort).

Thus, it can be seen that the effects do not seem particularly significant, at least in changing the incidence of poverty, because in very few households receiving social aid there are employed people. But such a value of almost 3% is also important when it comes to reducing poverty among vulnerable people who face this risk. In the same time, it is noted that the budget effort is relatively important, especially in a period of crisis, but it can still be correlated with a certain decrease in the poverty rate.

Concluding, it is found that, when 35% of work incomes are not taking into account, the scenario showed that the poverty rate would be influenced by 2.74%, in the sense of decreasing it, when applying the new activation element. This decrease in poverty is not particularly significant, but it shows a certain trend, which has confirmed the hypothesis from which it was based in this scenario, namely that an insertion of an activation element more stimulating than the present one, it could involve a decrease in the risk of poverty among beneficiaries. However, perhaps a higher threshold of work-incentive could have a more pronounced impact on reducing poverty among recipients, but also with an obvious setback, in increasing the budgetary effort. Even if it is not appropriate to increase the budgetary effort in such a current crisis period, however this simulation exercise and new outcomes could interest decision-makers in responding to the pro-active motivation of social aid recipients to transition into employment.

## 5. CONCLUSION

The goal of this paper was to analyse the potential positive effects of the simulation scenarios regarding the presence of a new minimum work-incentive element into the guaranteed minimum income, to highlight the measure of the poverty incidence reduction among the poorest people receiving social aid and to estimate the budgetary effort needed to sustain this proactive support. In the same time, this work-incentive component means that the beneficiaries are stimulated to find a job and to receive the social aid in the same time, in certain conditions. The results of the simulations exercise using the EUROMOD microsimulation model showed:

- social effects: the change in poverty rates in the simulated scenario compared to the current situation, would lead to a 2.74% decrease in the incidence of poverty;
- economic effects: the change in the fiscal effort in the simulated scenario compared to the current situation would mean an increase of 15%.

Even if these effects do not seem to be particularly significant, they provide a certain picture, as a foundation for addressing those pathways that promote discouragement of dependence on social aid and stimulate the activation of beneficiaries. Unfortunately, the EUROMOD model cannot capture the change in the employment transition of GMI beneficiaries, so it cannot simulate how much the proactive behaviour of social aid recipients could change under the condition of this new threshold of pro-work incentive. But it is certain that, through this encouragement of employment, the new program makes practically the transition from outdated passive solutions to active ones to promote occupational inclusion. This transition into employment would be beneficial for the individual and the family receiving social aid, as it would obtain income from employment, that would contribute to a better standard of living, with all the advantages deriving from this new status as an employed person on the labour market; a benefit also for the community, whereas it would lead to an increase in the well-being and quality of life of its citizens; a huge support for the social assistance system, as by migrating a larger mass of recipients to employment it would relieve the necessary resources involved in supporting them (exceeding the GMI eligibility threshold, the income from their employment would no longer lead to receive social aid), and so on. It is obvious that there could be other positive effects, which this EUROMOD microsimulation model cannot surprise, besides the fact that the person would have a job, which would increase his income from employment and get out of the social assistance network, with all the economic, social, psychological implications it can have on the individual and family; the budgetary effort could be reduced, as a result of decrease in the number of people / households receiving social aid (to a higher employment wage, the disposable income of household members would lead to the movement above the poverty line and those persons / households would no longer be eligible for GMI, or could still be placed slightly below the eligibility threshold, and the difference granted as a social support would be lower), and so on. All these actions could be translated into a win-win action for all (person / household, community, social assistance system, financial support, state). At the same time, potential negative effects such as the poverty trap or low incomes should be taken into account, as identified by some authors who focused on the tax rate on low wage earners / the low-wage trap (Lincaru, Ciuca, 2014), or also on other barriers for

persons to become active (Grigorescu et al. 2020). In conclusion, we consider that the ex-ante impact assessments of this simulation exercise based on the proposed scenario manage to outline a rather expressive picture of the influence of the GMI which contains a new pro-active component, aimed to stimulate the recipients of social aid program in their transition from the social assisted person status to employed person. The picture drawn from the simulations shows a certain ex-ante impact on reducing the incidence of poverty that can be considered not particularly expressive, but still important when referring to the poorest people who benefit from the guaranteed minimum income. On the other hand, in the simulations carried out, the decrease of the poverty incidence is recorded in the total population; it is possible that for certain types of households, especially those with dependent children, or those found in rural areas, these poverty reductions will be more expressive, in the context of the proposed scenario, especially as these segments present more vulnerabilities, facing a much more pronounced risk of poverty and social exclusion. Until the implementation of the Law on new minimum inclusion income, which contains a much higher threshold, which would involve a much more consistent budgetary effort, this approach with a lower threshold of 35% could be a reasonable balance from the decisional perspective (but in the paper established assumptions, other research studies with other thresholds and iterations remain open). And this picture is also reasonable, especially under restrictive and simultaneous conditions of poverty reduction in accordance with the targets and deadlines set out in the specific strategies undertaken, but also not to entail particular budgetary costs, especially in the current priority budgetary constraints, amid the new economic crisis generated by the Covid 19 period and the implications of the new conflict at the border of the country, both with effects that will cancel out small progress (regarding the poverty decreasing in the last years), with long-term consequences, affecting more vulnerable and poor people.

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# Application of Multiple Regression Analysis in modeling the role of the hotel industry in a country's economy

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## **ABSTRACT**

*The aim of this paper is to present the relationship between independent variables that represent one of the indicators of hotel operations and their importance for the country's economic development as measured by gross domestic product in the activities of providing lodging and food and beverage services. The research sample consists of hotel enterprises located on the territory of the Republic of Croatia that provided yearly financial statements from 2002 to 2018. Multiple linear regression analysis revealed a strong significant link between the set variables within the model, indicating that the given independent variables are significant predictors of gross domestic product in the activity of providing accommodation and food and beverage preparation and service, confirming the positive impact of hotel operations on economic development.*

**Keywords:** *hotel industry, economy, Croatia, multiple regression analysis*

## **1. INTRODUCTION**

The impact of the tourism industry on the economic growth and development of the country is the most revised and discussed topic in the professional literature (Brida, et al., 2017). In addition, the literature is full of alternative explanations of the economic transformation within which the role of tourism development in terms of job creation is more sharpened, which has a positive effect on increasing living standards, the national product and foreign exchange income (Folarin, et al., 2017). It is the hotel industry that is an important component of the before-mentioned contribution. The global economy is seeing increasing international ownership of many hotel and restaurant chains that have become major players worldwide (Brida, Cortes-Jimenez & Pulina, 2016). The hotel sector is regarded as a cyclical industry, one that is highly sensitive to economic conditions (Bodie et al., 2008). This is because hotel companies have larger fixed expenses (costs incurred by all businesses regardless of their degree of production) than variable costs (costs that increase or decrease as the company produces more or less). Hotel enterprises with large, fixed costs are extremely susceptible to business conditions since they are unable to minimize expenses as production declines in reaction to dropping revenues during economic downturns. As a result, hotel earnings will rise in tandem with sales, as costs do not vary to adjust for revenue fluctuations (i.e., small changes in business conditions can have profound effects on hotel profitability). High fixed costs, as Graham and Harris (1999)

pointed out, necessitate hotels to maintain high incomes to exist and create appropriate profits. Aside from the economic environment, tourist expansion or growth can have a significant impact on hotel firms' corporate success. On but one hand, expanding the tourism sector or activities immediately boosts hotel industry development by raising occupancy rates and thus sales revenue. However, the growth of tourism can greatly improve the business environment, which has an indirect impact on hotel company success. Previous research has shown that increasing tourism can help to boost economic development (Balaguer and Cantavella-Jorda, 2002, Dritsakakis, 2004, Fayissa et al., 2008, Gunduz and Hatemi-J, 2005, Kim et al., 2006, Lee and Chang, 2008, Proenca and Soukiazis, 2008). Chen (2007b) showed that better economic conditions resulting from tourism, and expansion can boost corporate earnings and improve the financial performance of tourism-related businesses. To put it another way, the development of tourism is predicted to boost hotel company performance. The environment in which all businesses function is referred to as the economy (Bodie, Kane, and Marcus, 2008). As a result, the company's prospects are inextricably linked to the status of the economy (or economic climate). Specifically, changes in the enterprise's business are directly linked to the expansion and contraction of the business cycle. According to Bodie and colleagues (2008), the economic climate may have a higher impact on profitability than the company's industry success. Economic conditions can have an impact on the performance of hotel businesses. Moderate growth and economic development are the key characteristics that indicate the economy's macroeconomic stability. Tourism was originally thought to contribute a negligible economic contribution to destinations (Vanhove, 2011), but this statement was quickly debunked by the government, experts, and researchers who recognized the significant economic potential that tourism brings (Nunkoo, Seetanah, Jaffur, Moraghen, & Sannassee, 2011). (2020). Tourism is an important source of revenue for many developing countries, and it has a favorable effect on the balance of payments and the population's living standards (Paramati, Alam, and Chen 2017). Many academics have been able to investigate the relationship between economic growth and tourism thanks to the economic functions of tourism (Nunkoo et 2020). According to Li, Jin, and Shi, the momentum of tourist activities that are evident through economic elements can be examined through numerous different consequences (2018). According to Brida, Pereya, and Devesa (2008), one technique to investigate tourist activity is to look at it in three different ways: direct, indirect, and induced. According to Scheyvens & Russell (2012) and Lee (2009), tourism has a key role in, increasing social welfare, relieving poverty, and capital accumulation. Furthermore, tourist efficiency and productivity are aspects that have a favorable impact exactly on the allocation of economic resources to minimize costs, increase performance, and maintain high tourism competitiveness within tourism-related activities (Hong, 2009; Goncalves, 2013). In comparison to the rest of the economy, catering activities "hotels and restaurants" show above-average GDP and employment growth; however, salary growth in the industry does not follow the same pattern but follows average wage growth. Instead of paying employees, the team opens up the opportunity of investing surplus funds in business development. Employee dissatisfaction, which is a major aspect of the provision of (in)quality service in this sector, is a negative consequence of poorer wage growth, which remains much lower than the national average (Matzler and Renzl, 2007). Because production costs are determined by labor productivity, it is a major indication of corporate performance. It also determines the level of economy and profitability. It is also distinguished from other economic indicators by the fact that it is an important indicator of development and economic development dynamics, and that it is dependent on the country's degree of material well-being and the fulfillment of individual residents' material requirements. Productivity is defined as "the relationship between the number of goods or services produced and the working time spent on their implementation, that is, the amount of labor that participated in this production with normal strain" in a broad sense. In a narrow sense, productivity or net productivity is defined as "the relationship between the number of goods or services produced and the working time spent on their implementation, that is, the amount of labor that participated in this production with normal strain" in a narrow sense (Sunajko, 2010).

## 2. LITERATURE REVIEW

The Lee and Kwon Study (1995) emphasizes the importance of receiving foreign tourists as an economic driver of growth, stating that tourism creates jobs through its multiplier impact. Tourism revenue is a significant role in the local economy and has an impact on development because it contains foreign currency (Hazari, 1993). Foreign currency has an impact on growth since it allows for the import of inputs, which stimulates the overall economy (Balaguer and Cantavella-Jorda, 2002). The fact that tourism accounts for a fifth of state revenue indicate how important it is in Croatia (Đorđević, Ganjto, Vrenko, 2017). Škuflić and Mlinarić (2015), who conducted their research using a dynamic panel, underline the importance of the hotel industry in the Republic of Croatia. The profitability of the previous period, the size of the company, its age, liquidity, solvency, capital productivity, and labor productivity were all factors considered in their study. The findings of their study show that all variables, except for the enterprise's age, have a favorable impact on the increase of hotel profitability. Mlinarić (2015) conducts their research using a dynamic panel. The profitability of the previous period, the size, age of the business, liquidity, solvency, capital productivity, and labor productivity were all factors considered in their study. The findings of their study show that all variables, except for the variable age of the business, have a positive impact on the growth of hotel profitability. Nasir, Wu, and Guerrero investigated the relationship between tourism and economic growth using variables such as the number of luxury hotels, hotel price index, and exchange rate in their research on the case of Andalusia and Spain (2015). They confirm that foreign tourism has contributed to Andalusia's economic growth by using multiple regressions. The survey by Salchow, Bayramli, and Aliyeva (2019) on the case of Kazakhstan similarly employed multiple regression. The authors confirmed the statistical significance of the relationship between tourism and export earnings, i.e., the findings of their study demonstrate that tourism activities have a favorable impact on economic growth based on exports. Singh, Johnson, and Mandelbaum used a correlation coefficient-based time series analysis to estimate the performance of the hotel market (2016). The correlation study revealed that macroeconomic variables such as gross domestic product, unemployment, and the consumer price index influenced hotel company performance indicators and vice versa. The Exantín survey aims to determine the impact of tourists' overnight stays in hotels and capital expenditures by all sectors directly involved in tourism on tourism's overall contribution to GDP (2012). The author indicates that, with the exception of the variable of overnight stays in Albania, all factors are positively related using multiple regressions. Using multiple regressions, the author concludes that all factors are positively related, with the exception of the variable of overnight hotel stays, which shows no significant findings. Ridderstaat, Croes, and Nijkamp (2014) and Dogra and Bulut (2015) investigated the two-way relationship between tourism and the economy (2018). On the other hand, research has been conducted on the impact of macro factors and non-macro factors on the hotel industry shares of Chinese hotels (Chen, 2007). The findings of the study revealed that both macro and non-macro factors can be important drivers of hotel stock returns, according to regression analysis. In their study, Li, Tavitiyaman, and Chen (2020) focus on predicting visitor patterns in China. To examine the impact of the before-mentioned variables on tourism developments in China, the authors employed multiple regressions with variables such as aircraft routes, hotel numbers, and Mongolian and Russian gross domestic product. The study's findings supported the favorable influence of the examined variables in favor of expanding travel trends to China. Studies on the example of Pakistan by Khalil et al. (2007), on the example of Taiwan and South Korea by Ching-Fu and Chiou-Wei, and on the example of Pakistan by Khalil et al. (2007) have all confirmed the tourism-driven hypothesis of economic growth (2009). Although the development of the tourism business is expected to have a direct positive influence on hotels, it can have an indirect impact on the hotel industry through its ability to enhance the state of the economy, hence improving hotel corporate performance. Tourism expansion has been shown to help the economy in empirical studies (Balaguer and Cantavella-Jorda, 2002, Dritsakis, 2004, Gunduz and Hatemi-J, 2005, Kim et al., 2006). Within a micro-study for U.S. entrepreneurs, authors Tang and Jang (2009) conclude that GDP growth is significantly influenced by revenues from the sale of hotels and restaurants and casinos.

The tourism-driven growth theory, suggested by Balaguer and Cantavella-Jorda (2002), states that tourism expansion is an important factor in the development of the Spanish economy. The hypothesis was supported by empirical results based on co-integration and causation testing. The findings of co-integration tests established a long-term link between tourist benefits and GDP, and causation tests revealed that tourist expansion can lead to economic development. Dritsakis (2004) investigated whether tourism may contribute to Greece's long-term economic prosperity. The link between tourism and GDP revenues has been discovered. Furthermore, there was a two-way causal relationship between GDP growth and tourism revenues. To put it another way, tourism revenue and GDP growth could be boosted. Turkey, like many developing countries, has targeted tourism as part of its economic growth plan, according to Gunduz and Hatemi (2005). They investigated whether tourist expansion contributed to Turkey's economic growth, putting the tourism-driven growth hypothesis to the test. The survey's findings revealed that tourism development can lead to economic growth, confirming the tourism-driven growth theory's applicability to Turkey. Kim et al. (2006) investigated the causal relationship between tourism expansion (as measured by the number of total foreign visitor arrivals) and economic growth (GDP growth) in Taiwan. The results of the cointegration and causation tests revealed the two components' long-term equilibrium connection and two-way causation. To put it another way, a growing economy can lead to increased tourism, while an increase in the number of foreign tourists to Taiwan can help the economy thrive. Similarly, international tourist spending boosted African economies (Fayissa et al., 2008), and tourism improved living standards in four Southern European nations (Greece, Italy, Portugal, and Spain) (Proenca and Soukiazis, 2008). Using the heterogeneous panel co-integration technique, Lee and Chang (2008) examined long-term trends and causal linkages between tourist development and economic growth for OECD and non-OECD countries (including those in Asia, Latin America, and Sub-Saharan Africa). After offering a heterogeneous effect on the country, they discovered a globally co-integrated relationship between GDP and tourist development. Furthermore, tourist development in non-OECD nations has had a bigger influence on GDP than in OECD ones. Tourism development could lead to economic growth in OECD countries in the long run, with two factors reinforcing each other in non-OECD countries. Furthermore, Chen, Kim, and Liao (2009) pointed out that the tourism industry has experienced significant growth since the Taiwanese government modified its weekend policy in 2001, and that foreign institutional investments in tourism firm stocks have increased since then. They added that international institutional investors increased their holdings in tourist equities because they anticipate a beneficial impact of weekend policy changes on tourism company profitability and are enthusiastic about the industry's future performance. They also demonstrated that boosting foreign shares can improve the performance of tourist equities while lowering the risk of them returning.

### **3. DATA AND VARIABLES**

The focus of this study is on the activities of hotel firms in the Republic of Croatia that produced yearly financial accounts, as well as their impact on the country's economic development from 2002 to 2018. At the macro level, relevant annual data from the financial statements of hotel corporations were employed. The Financial Agency provided the data on the activities of hotel companies used in the model (FINA). The Croatian Bureau of Statistics provided data on the gross domestic product in the activities of providing accommodation and serving food and beverages at constant prices. For a period of 17 years, the data is tracked (2002-2018). The major goal of this study is to see how ten independent factors influence gross domestic product in the activities of providing lodging and food and beverage service as one the indicators of hotel operations: (1) number of hotel employees, (2) profit, (3) average net salary in hotels, and (4) assets, (5) investments in new fixed assets, (6) employed with higher professional qualifications, (7) labor productivity, (8) income, 9) income tax, and 10) average net salary per employee.

#### 4. RESULTS OF MULTIPLE LINEAR REGRESSION

The hotel's impact on economic growth will be evaluated using the multiple linear regression method. The primary goal of multiple linear regression analysis is to predict or estimate the mean value of the dependent variable Y using known values for various independent variables. The multivariate technique of analysis includes regression analysis, whereas the explanatory method of analysis does not (Kulcsar, 2009:59). The simultaneous relationships that two or more independent variables can have over a single dependent variable are studied using multiple regression analysis (Leter, 2004:364). An econometric model of multiple linear regression was used to prove the claim that "the business of hotel firms plays an essential role in the economic development of the country." Multiple regression was chosen because it investigates the relationship between one dependent variable and one or more independent variables, according to Kulcsar's (2009) role model. The model was implemented using the STATA programming model. Five models of multiple regression were run to confirm the relevance of hotel operations and the notion that they are substantially responsible for the country's economic development. The same dependent variable was used in the models, while independent variables changed. The results of the model are shown in Table 1.

*Table 1. Empirical evidence*

Variable	Dependent variable lnGDP_cons				
	1.Model (P>t)	2.Model (P>t)	3.Model (P>t)	4.Model (P>t)	5.Model (P>t)
Lnprofit	0.000***				
Lnassets	0.000***				
Lninv		0.061*			
Lnedu		0.000***			
Lnempl			0.001***		
Lminctax			0.036**		
Lnwage				0.000***	
Lnprod				0.000***	
Lninc					0.000***
lnAverage_wage					0.000***
R-squared	0.9882	0.9596	0.7419	0.9874	0.9881
Adj R-squared	0.9865	0.9538	0.7022	0.9856	0.9864
F-statistic	584.04	166.12	18.68	548.36	580.40
Observation	17	17	17	17	17
Multicollinearity*	1.24	1.04	1.20	9.28	9.54
Heteroskedasticity **	0.2557	0.8171	0.716	0.7795	0.8108

Note: p-values in parentheses \*\*\* p<0.01, \*\*p<0.05, \*p<0.1

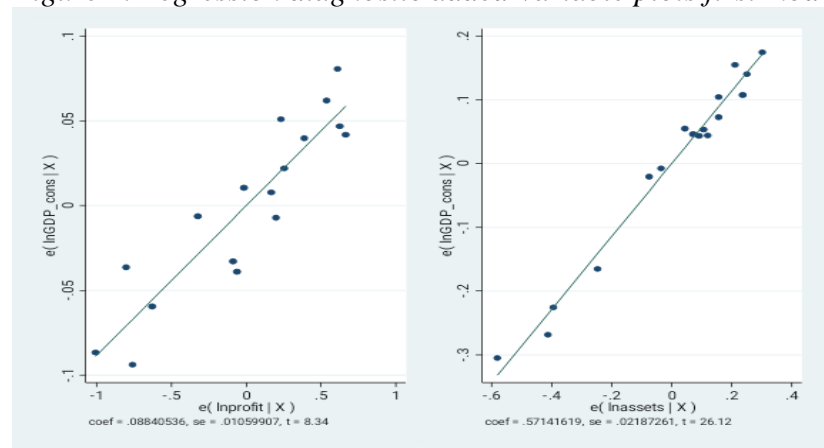
\*VIF: Multicollinearity VIF<5\*\*, VIF<10\*

\*\*Breusch-Pagan / Cook-Weisberg test for heteroskedasticity p > 0,1

Source: Authors' calculations.

*Figure following on the next page*

Figure 1. Regression diagnostic added-variable plots first model



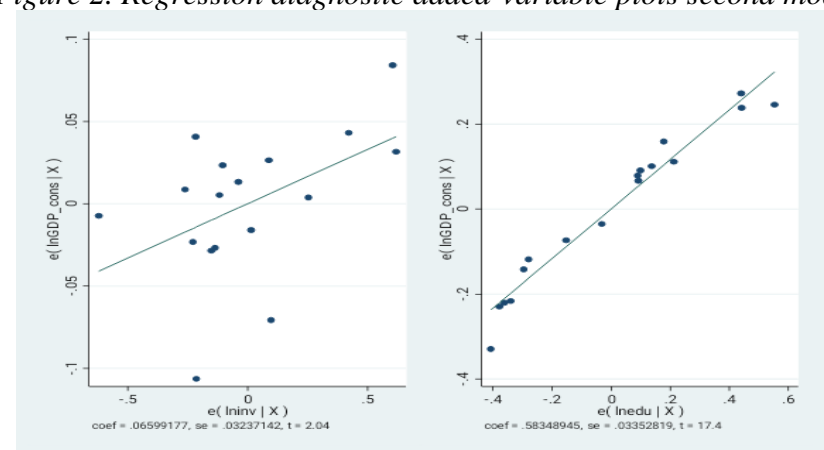
Source: author's calculation

The equation for multiple linear regression is:

$$\ln\text{GDP\_cons} = -1.677688 + 0.0884054 \ln\text{profit} + 0.5714162 \ln\text{assets}$$

The findings of multiple regressions on the given variables demonstrate that profit has a positive and significant impact on GDP ( $B = 0.09$ ,  $p = 0.001$ ), as does asset impact on GDP ( $B = 0.57$ ,  $p = 0.001$ ). An increase of one in hotel profits results in a 0.0884054 billion Croatian kuna increase in the gross domestic product. In addition, increasing the assets of hotel enterprises by one improves the gross domestic product by HRK 0.5714162 billion. The set model's coefficient of determination is  $R^2 = 0.9882$ , implying that the chosen multi-regression model explained 98.82 percent of all variations. That is, the hotel industry accounts for 98.65% of the variance in the variable of gross domestic product. The model supports the premise and emphasizes the relevance of hotel operations in the country's economic development. In addition to the  $p < 0.001$  threshold of significance, the model is significant, and the hypothesis that hotel businesses play a role in the country's economic development, that is, linkages, is validated.

Figure 2. Regression diagnostic added-variable plots second model



Source: author's calculation

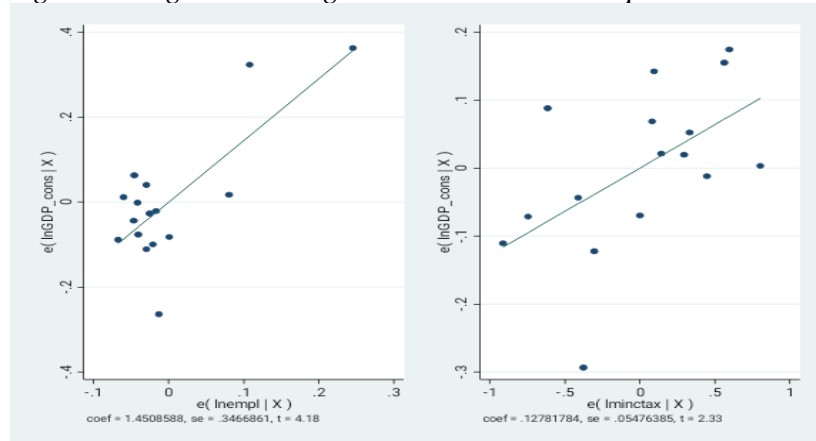
The equation for multiple linear regression is:

$$\ln\text{GDP\_cons} = 4.008482 + 0.0659918 \ln\text{inv} + 0.5834895 \ln\text{edu}$$



The results of the multiple regressions on the given variables demonstrate that investments in new fixed assets have a positive and substantial impact on GDP ( $B = 0.07$ ,  $p0.1$ ), as does the impact of higher-qualified personnel in hotels on GDP ( $B = 0.58$ ,  $p0.001$ ). An increase of 1 in new fixed asset investments results in an increase of HRK 0.0659918 billion in gross domestic product. Furthermore, increasing the number of employed workers with a higher education by one boost the gross domestic product by HRK 0.5834895 billion. The set model's coefficient of determination is  $R^2 = 0.9596$ , indicating that the chosen multi-regression model explained 95.96 percent of all variances. In other words, the hotel industry accounts for 95.38 percent of the variance in the variable of gross domestic product. The model supports the premise and emphasizes the relevance of hotel operations in the country's economic development. In addition to the level of significance at  $p < 0.1$ , the model is significant, and the premise that hotel businesses play a role in the country's economic development, that is, links, is validated.

Figure 3. Regression diagnostic added-variable plots third model



Source: author's calculation

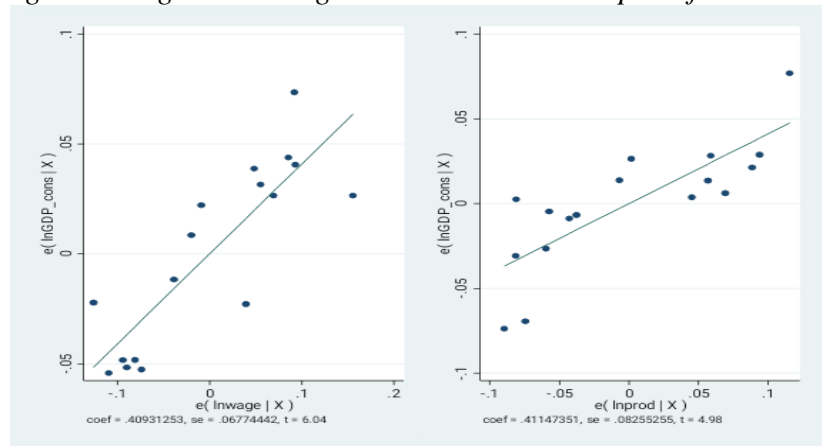
The equation for multiple linear regression is:

$$\ln GDP\_cons = -6.522134 + 1.450859 \ln empl + 0.1278178 \ln inctax$$

Employees have a positive and substantial impact on GDP ( $B = 1.45$ ,  $p0.001$ ), as does the impact of tax revenues on GDP ( $B = 0.13$ ,  $p0.05$ ), according to the findings of multiple regressions performed on the specified variables. In other words, increasing the number of hotel employees by one result in an increase in the gross domestic product of HRK 1.450859 billion. Furthermore, if tax revenues created by hotel companies through their operations grow by HRK 0.1278178 billion, the gross domestic product increases by HRK 0.1278178 billion. The set model's coefficient of determination is  $R^2 = 0.7419$ , implying that the chosen multi-regression model explained 74.19 percent of all variances. In other words, the hotel industry accounts for 70.22 percent of the variance in the variable of gross domestic product. The model supports the premise and emphasizes the relevance of hotel operations in the country's economic development. In addition to the level of significance at  $p < 0.05$ , the model is significant, and the premise that hotel businesses play a role in the country's economic development, that is, links, is validated.

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Figure 4. Regression diagnostic added-variable plots fourth model



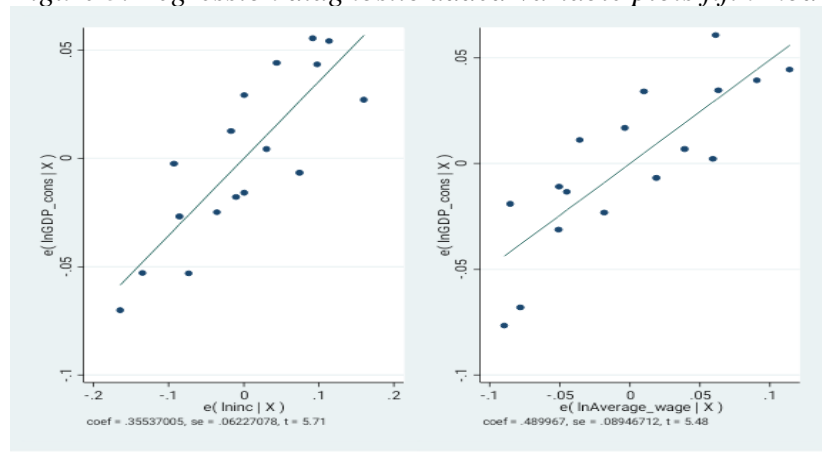
Source: author's calculation

The equation for multiple linear regression is:

$$\ln \text{GDP\_cons} = 1.32582 + 0.4093125 \ln \text{wage} + 0.4114735 \ln \text{prod}$$

The influence of net wages and wages on GDP, as well as the impact of labour productivity on GDP ( $B = 0.41$ ,  $p0.001$ ), is positive and significant ( $B = 0.41$ ,  $p0.001$ ), according to the results of multiple regressions on the given variables. In other words, a 1 rise in total net salaries and wages in hotel companies results in an HRK 0.4093125 billion gain in the gross domestic product. Furthermore, if the productivity of hotel work increases by one, the gross domestic product rises by HRK 0.4114735 billion. The set model's coefficient of determination is  $R^2 = 0.9874$ , implying that the chosen multiession model explained 98.74 percent of all variances. In other words, the hotel industry accounts for 98.56 percent of the variance in the variable of gross domestic product. The model supports the premise and emphasizes the relevance of hotel operations in the count significances development. In addition to the level of significance at  $p < 0.01$ , the model is significant, and the premise that hotel businesses play a role in the country's economic development, that is, links, is validated.

Figure 5. Regression diagnostic added-variable plots fifth model



Source: author's calculation

The equation for multiple linear regression is:

$$\ln \text{GDP\_cons} = -0.2884906 + 0.3553701 \ln \text{inc} + 0.489967 \ln \text{Average\_wage}$$

The results of the multiple regressions conducted on the given variables demonstrate that income has a positive and substantial impact on GDP ( $B = 0.36$ ,  $p0.001$ ), as does the average net wage per employee ( $B = 0.49$ ,  $p0.001$ ).

In other words, a 1 rise in hotel revenues results in an HRK 0.3553701 billion increase in the gross domestic product. Furthermore, if the average net salary per employee is increased by one, the gross domestic product rises by HRK 0.489967 billion. The set model's coefficient of determination is  $R^2 = 0.9881$ , implying that the chosen multi-regression model explained 98.81 percent of all variances. That is, the hotel industry accounts for 98.74% of the variance in the variable of gross domestic product. The model supports the premise and emphasizes the relevance of hotel operations in the country's economic development. In addition to the level of significance at  $p < 0.001$ , the model is significant, and the idea that hotel businesses play a role in the country's economic development, that is, links, is validated.

## 5. CONCLUSION

In terms of economic growth, Croatia's hotel industry is one of the most prominent among all tourism operations. The data from 2002 to 2018 spans a period of economic boom, bust, and recovery, illuminating the link between hotel businesses and economic growth. The authors confirm the positive link between hotel operations and economic development after conducting multiple linear regression analyses to assess the impact of certain indicators of hotel operations on a gross domestic product, the activity of providing accommodation, and the preparation and serving of food and beverages. It is suggested that future scholars look at the role of hotel operations in the economic development of other countries. When assessing how much other countries rely on hotel company activities, a comparative analysis of the impact of hotel company operations by selected countries is recommended.

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## Management in Tourism and Integration of the Tourism Demand Segment

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### **ABSTRACT**

*Observing tourism as an economic activity, it can be concluded that according to its characteristics and specific elements of the tourist market, tourism differs from other activities. The main characteristics of the tourism industry are related to the elasticity of demand and inelasticity of market supply, the seasonal nature of business, heterogeneity of business, and the nature of “work” in tourism. Understanding these characteristics helps management structures in making a range of decisions at different levels of management in tourism. Whether a tourism company or a tourist destination, region, or state - decisions made at all management levels must be the result of good knowledge, reflection, and, understanding. The management of tourism companies must keep a balance between efficiency and effectiveness. For managers, it is also very important to balance tourist supply and tourist demand. The paper will emphasize the segmentation of touristic demand, as well as the importance of successful management in the tourism business.*

**Keywords:** *Tourism, economic activity, tourist market, tourist demand, managerial structures, efficiency, and effectiveness*

### **1. INTRODUCTION**

Some authors understand management knowledge as a sort of art - doing business with people, emphasizing the social component of the overall process (Koontz & O'Donell, 1976). Other authors emphasize the importance of achieving organizational goals or as an adequate process of determining and guiding a firm's course toward goals (Stoner & Freeman, 1992). The concept of management is also defined as the process by which purposeful organizations are created, directed, maintained, and operated through coordinated and cooperative human effort (Vukovic et al, 2010). From the aspect of tourism management, the definition is sufficiently comprehensive and adapted to the requirements of the modern environment, management means the process of working with and in cooperation with other people to effectively achieve organizational goals, with efficient use of limited resources in a changing environment (Zejda & Zelenka, 2019) (Schermerhorn Jr et al, 2020). Balancing efficiency and effectiveness is especially important for management in tourism companies. For example, a hotel can have extremely low-efficiency costs and at first glance, a successful business is likely, but due to its poor position, away from major traffic flows, or in an unapproved destination, although it has a cost advantage - its sales will be insufficient and unsuccessful. do business (Stoll, 2006) (Cerovic & Radovic, 2011). It is similar to travel agencies. The travel agency has a very low price for the package deal, however, there is no demand for that destination, and the agency will show a loss on that project.

During the last two decades, an increasing segmentation of the tourist market has been noticed. In addition to tourists who are mostly focused on enjoying tourist trips, a new group of tourists has appeared, who travel to discover and learn something new (Daft, 2015). The growth of mass forms of tourist traffic, directed towards coastal destinations, is decreasing. An increasingly significant share in world tourist traffic is realized by the so-called selective forms of tourism, which represent tourist movements whose goal is to get to know the specific characteristics of certain areas. The modern tourist market has undergone major qualitative and quantitative changes (Vujovic, et al, 2011). The tourist market is no longer seen as a simple relationship between unchanging supply and elastic demand. Today, demand is an extremely unstable category, whose changes are difficult to predict. The success of tourism companies is uncertain and is closely linked to changes in the field of tourism demand. The tourist offer must be constantly adjusted to the tourist demand, based on the examination of the wishes and needs of the tourists themselves (Stojanovic, 2014). The formation of tourist demand is influenced by two groups of factors: external and internal. External refers to the influences from the environment (work and environment). They represent the objective factors that determine tourist movements. Among the most important external factors are - the amount of free time, the economic strength of tourists, demographic changes, and political changes (Bloom et al, 2016) (Petrovic, & Bonacin, 2017). Internal factors mean the psychological moment, which is becoming increasingly important in the formation and satisfaction of tourist demand. Internal factors are subjective and represent personal perceptions of potential tourists, which can be predicted only by continuous research of their attitudes. They represent an extremely unstable category because the participants in tourist movements represent people with different personality characteristics (Ilic, Al Salameh & Andjelic, 2022) (Todorovic et al, 2020) (Cerovic, & Knezevic, 2019).

## **2. THE CONCENTRATION OF TOURIST DEMAND – LITERATURE REVIEW**

Organized grouping and concentration of tourist demand occurs mostly in the markets and in the countries where it manifests itself. It is certainly important not to forget the individual demand that is present, although it is increasingly losing importance concerning concentrated demand. The characteristic of the concentration of tourist demand takes various forms, and it is performed not only by commercial travel agencies but also by many other organizations, which operate in tourism or outside it. For example, according to some authors, "TOUR operators" have a significant role, especially in developed countries, such as Germany, Great Britain, the USA, the Netherlands, etc. (Veselinovic et al, 2011). The importance of mass social tourist organizations, which function on an amateur basis, is emphasized. For example, mountaineering associations, motorists' associations, youth holiday organizations, camper organizations, social security organizations, various sports, and religious organizations, and similar associations are organized on the demand side in tourism, with the desire to provide more favorable travel and living conditions (Vasiljevic, 2012). An identical process is also taking place on the tourist supply side, as with the concentration of tourist demand. The trays of these sides - supply and demand - should ideally be in one place. However, given the many factors that operate from the environment, as well as the internal factors that come from the organizations themselves, managers often have their hands full to restore the shaky balance of this seesaw. Limiting factors for establishing a balance between tourist supply and demand are related to the seasonal character of tourist business, given the fact that providers and users of tourism services, especially catering (as one of the most important branches of tourism), are related to the business tourist season. Also, the characteristics of the technological process of providing services in catering, with the emphasis on the role of personal work, do not allow the introduction of such forms of basic organizational units that could be included in the production of services on the principle of mass production. This is not the case with other economic activities, for example with production activities, because they base their business on mass production and economies of scale. In the tourism industry, it is not uncommon for businesses to have low individual profitability, especially in the hospitality industry (WTTC - World Travel & Tourism Council (2012). For Italy, as well as for many other countries such as Spain, Switzerland, and France, it is specific that about 90% of all accommodation facilities are organizational units whose capacity does not exceed 45 beds (Njegovan, 2016). In these



countries, therefore, there are (smaller) family tourism companies or family companies, which represent the basic basis for the development of the tourism industry. In addition, the existence of other types of tourist organizational units in tourism is evident, ie units that have large capacities. However, when factors that can significantly affect the supply and demand of tourism are taken into account, we must not forget the health factor, which is one of the most important. The importance of human stability and health for the smooth running of life, work, and especially the global economy and the tourism industry can be seen in the outbreak of the COVID-19 virus pandemic (Luković, & Stojković, 2020). At one point in late 2019, all of humanity stopped. It no longer mattered how much was produced or how much money was earned, but the most important thing was to find a cure against a dangerous enemy (Strumpf, 2020) (Ilic & Djukic, 2021). The COVID-19 virus pandemic hit the tourism sector the hardest, as measures to control the disease were isolation, a ban on gatherings, and travel. Countries were locked so that the virus would not spread further. In that period, which lasted a little more than 2 years, there was a decrease in the tourist market, both supply and demand (logically) (Hani, Jompa & Nessa, 2021) (Sirletti, et al, 2020). Demand was reduced by restrictions on movement, and shocks on the supply side came about due to labor supply constraints and difficulties in procuring the necessary inputs. Access to finance was problematic, as borrowing opportunities declined (while demand for finance increased). Finally, uncertainty related to this crisis has negatively affected investment and innovation. Many, otherwise healthy organizations were shut down due to such a temporary shock, which on the other hand had an impact on the social sphere. In Serbia, service industries and smaller companies have experienced the most severe consequences (World Bank, Group, 2020). The authors will try to clarify the importance of integration in the tourism sector, making a modest contribution to this segment of the tourism business.

### 3. METHODOLOGY

In the paper, the authors will use the methods of comparison, as well as the descriptive method to compare horizontal and vertical integration in the tourism industry, and then describe them (integrations) in more detail. The processes of horizontal and vertical integration have widely affected tourism, and the creation of a single European market is increasingly influencing the "Europeanization" and "globalization" of the market and tourism products (Cavlek, 1994). Horizontal and vertical integration in tourism is presented in Figure 1. The figure shows that horizontal integration connects hotels and airlines. Connecting hotels with airlines involves both integrations - horizontally and vertically - and such integration is called complementary integration. Vertical integration connects various units within the tourist offer, in terms of catering services, and also travel agencies, where again there is a complementary integration - connecting these services (catering, tourist agencies) with airlines (Zecevic, 2014).

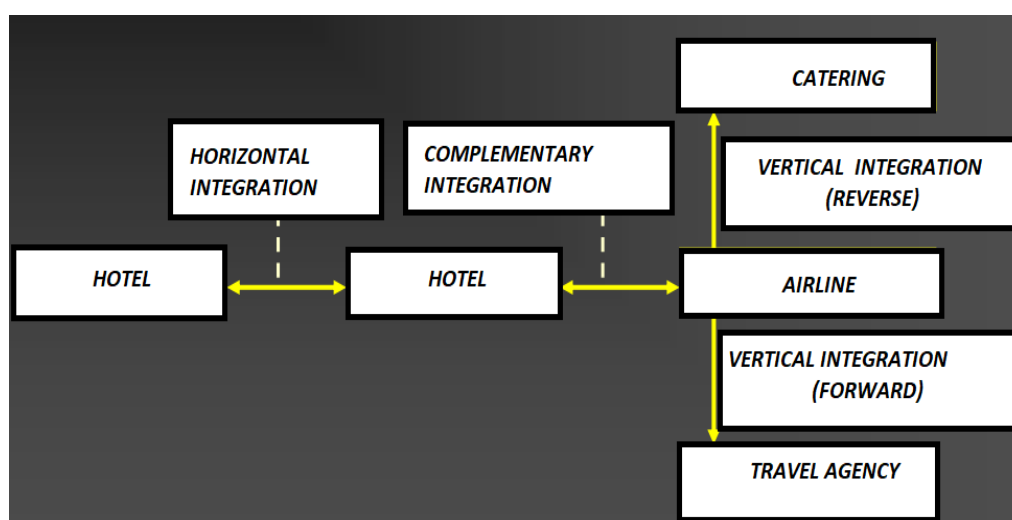


Figure1. Integration in tourism

Source: Tourism Economics 4

#### **4. HORIZONTAL CONCENTRATION / INTEGRATION IN TOURISM**

Horizontal concentration in tourism is reduced to the cooperation of activities within a certain industry. It is done through the coordination of business activities or stronger forms of association within the catering (hotel), travel agencies, trade, traffic, etc. (Lekovic & Djuric, 2013). With the globalization in the hotel industry, large companies and hotel chains have been created, which represent a united (integrated) form of the so-called microorganisms that are of great importance for tourism development (Njegovan, 2016). Horizontal forms of concentration can also be performed within a certain tourist place, source of tourist demand, or on a broader territorial basis. The advantages of horizontal concentration are reflected, (mainly) in the following (Clarke, 2005):

- conditions are created for greater savings based on the procurement and use of reproductive material as well as more rational use of staff;
- more favorable conditions are created for more rational investment activity, especially for capacity expansion,
- providing financial resources and reducing costs for their implementation;
- better conditions for organizing more efficient tourism market research, tourism promotion, sales, procurement, and other important business policy functions;
- and competitiveness about tourist demand and other tourist offer increases.

The most striking examples of horizontal concentration are in the case of travel agencies and the hospitality industry. When it comes to horizontal forms of connection in the field of travel agencies, the best examples can be found in Germany. Since 1968, a strong business group has been formed in this country, formed by four large travel agencies "TUI" (Touristik Union International) (TUI, 2020). TUI is one of the most successful travel organizers in the world. Through its numerous brochures and catalogs, it offers over 4,000 different types of programs. From its inception until today, TUI has constantly changed and improved its organization and business policy (Zuckerman, & Gal-Oz, 2013). Of all these changes, special attention should be paid to those related to reducing the role of individual destinations, which are promoted and sold under the sign of TUI as a whole. When it comes to the tour operator business, this tour operator has extensive activities not only in Germany but also in other EU countries, especially: Great Britain, Ireland, the Netherlands, France, Belgium, Switzerland, and Austria (Patten, & Ishii, 2000). The development of TUI has increasingly gone in the direction of vertical integration, especially with the development of accommodation and air transport activities. When it comes to the practice of forming horizontal forms of concentration in the field of the hotel business, the phenomena of forming hotel chains that operate in the world under a unique name are observed. In these cases, there is a standardized quality of services, a unique reservation system, and a common promotional policy, as well as other important common elements of business policy (Bong, et al, 2019). All of this has the effect of increasing the use of their capacities, reducing certain costs, and good business results. This primarily applies to hotel chains that fall into the highest hotel categories.

#### **5. VERTICAL CONCENTRATION / INTEGRATION IN TOURISM**

Today, it is difficult to draw a precise line between the various forms of horizontal and vertical concentration. However, vertical integration is developing more and more, considering that various tourist activities are increasingly integrated (integration of companies in the field of catering, transport, travel agencies, trade, etc.) (Pejanovic et al, 2014). This may include activities in the field of banking, agriculture, industry, and other activities interested in tourism development. These are companies with different economic activities, but which complement each other from the point of view of forming a complex tourist service. The analysis of tourism supply chains has traditionally focused on the two-party relationships between vertical suppliers. However, since a full supply chain is composed of horizontal, vertical, and diagonal suppliers, there is a gap in the literature regarding the dynamics of how these triadic relationships operate within a tourism supply chain (Fong et al, 2021). There are numerous examples of well-known vertical forms of integration in the field of tourism in the world. When it comes to connecting travel agencies, air transport, hotel facilities,

publishing, and a wide sales network of small travel agencies, the most frequently mentioned example is the travel organizer in Great Britain, the Thomson Group, which was formed in 1965. Although it has been constantly changing and expanding since its inception, it is typical for it to include all the aforementioned activities in its large system as a travel organizer (Lafferty & van Fossen, 2001). There are also many examples of vertical integration when it comes to large airlines that have developed their hotel chains, such as Pan American (PAN-AM), which worked to form the Intercontinental Hotels Corporation, and TWA in 1967. bought one of the two groups of Hilton hotels, which at that time included 39 hotels in 25 countries, with a capacity of about 15 thousand rooms. In addition to travel agencies and air transport companies, the process of vertical integration in tourism included well-known banks, large department stores, insurance companies, hotel chains, as well as some large companies in agriculture, industry, and publishing houses. It can be unequivocally concluded that the faster development of tourism in the world, and especially international tourism, has conditioned large financial capital, through various economic activities, enters the sphere of the tourism economy more significantly. This enabled the formation of various forms of horizontal and vertical integration, which in turn had an extremely positive impact on the development of tourism and the realization of high profits for their bearers (Inkson & Minnaert, 2018). According to Lorgnier & Su, co-creations of tourism enterprise values (regarding sports organizations) are rarely studied, although this type of joint value creation is essential for a better understanding of (sports) tourism networks. Lorgnier & Su propose strategies for cooperation, ie a mix of competition and cooperation between organizations. There is a need to better understand the parameters of strategies among non-profit organizations, and their cooperation with for-profit and/or public companies in the (sports) tourism industry, to understand network-wide value creation. Lorgnier & Su propose, among other things, cooperation among non-profit organizations, which is related to events and vertical integration with or without cooperation with public companies (Lorgnier & Su, 2014).

## **6. MANAGERS' ABILITIES IN TOURISM**

Business in tourism and hospitality can be characterized as complex and difficult - from the establishment of tourism as an economic activity, and its expansion - to the present day. First of all, one should keep in mind the needs and requirements of the users of tourist services, or tourist products (Vujic, 2004). Among other things, working hours should be adjusted to the requirements, and therefore the working hours of managers in tourism exceed the usual limits (with work at night, on holidays, and Sundays). A modern tourism manager should have the skills like any other manager in tertiary economic activities, but also certain specifics (Pearce, 2019 )(Cerovic, 2002) (Medlik, 2016):

- good knowledge of tourism, knowledge of opportunities in domestic and international tourism, especially in an increasingly globalized but also regionalized tourism market;
- analytical ability to solve everyday management problems based on factual analysis and numerical analysis, which requires good knowledge of past and current indicators of productivity and efficiency of tourist facilities, but also the company as a whole, especially the analysis of financial data;
- creativity and determination for tourism, especially hospitality, there are no pre-defined standards or recipes that guarantee high efficiency and effectiveness of business, so success in tourism is the result of sensitive decisions based on imaginative and innovative management techniques (this is the main reason why tourism the manager should be creative and able to generate and learn new ideas and solutions); the manager in tourism should be from the idea and a good analyst of the environment, processes in society, the requirements of the users of tourist services; determination means a person of action who, very quickly makes important decisions (must quickly judge and take action before direct competitors, but also to manage time, because better decisions are made if there is more time available; rapid changes in the tourism market and tourist behavior force tourism managers to make decisions quickly, safely and correctly;

- flexibility or ability to adapt to changing environmental conditions; continuity in adapting to rapid changes in trends, styles, and preferences of tourists; expressing the desire and enthusiasm to do what is necessary to complete the job;
- initiative to possess creative abilities and take original actions (without waiting for suggestions to do something like that); taking into account a large number of elements in the decision-making process (eg number of tourists and volume of tourist traffic, realized profit, equipment of facilities, opportunities to take actions, etc.);
- leadership or successful performance in tourism presupposes reliance on a large number of associates; one person, especially in large tourist companies, cannot act in isolation, nor can he be a successful manager in those conditions (which does not call into question his necessary leadership ambitions); the ability of tourism managers to inspire others to trust and respect their assessments, as well as the ability to lead and persuade their immediate associates;
- the organization is a condition for the existence of a successful tourism manager (he is often forced to act simultaneously while taking into account several factors, changes, functions, and projects); the quality of the tour manager is reflected in his ability to identify priorities and basic directions for the implementation of actions; to activate goals, a successful tourism manager must set priorities and organize staff and resources;
- entrepreneurship to anticipate events and situations, not to react afterward; energy in the implementation of ideas and programs (eg new tourism products);
- risk-taking, willingness to take calculated risks; willingness to take responsibility for decisions made and results achieved; willingness to take risks, at the cost of management and inevitable mistakes, to the point that sometimes there are losses.

Modern trends in tourism development are increasingly pointing to the conclusion of the existence of the next two groups of managers in tourism (Banjevic, 2019):

- analytical managers and
- creative managers.

The tourism manager-analyst is characterized by the ability to find and research facts for their reduction, synthesis, and evaluation, to make efficient business decisions. A creative manager in tourism is a producer or inventor of new ideas (these people have a very rich and fruitful imagination and the ability to create completely new things). They base their work more on imagination and intuition than on facts. However, in modern conditions of tourism development, it is not enough to be just creative, because a successful manager, in the decision-making process, must necessarily respect the analytical approach (Markovic et al, 2018).

## **7. INDICATORS FOR SUCCESSFUL TOURIST DESTINATION MANAGEMENT**

Marketing tries to explain guest behavior by applying models. A model is a hypothesis, which puts one or more dependent variables to several independent variables. There are two types of models: econometric models and behavioral models. Econometric models link common performance factors such as the number of overnight stays, tourism revenue, market share, or capacity utilization with input variables such as tourism advertising, disposable household income, and degree of distribution (Volgger & Pechlaner, 2014). These models do not provide answers to questions related to the guest decision-making process, behavioral models are used. Structural models of guest behavior point to multiple emotional and rational elements that e.g. determine behavior during travel. The knowledge at its disposal in these influencing factors is still not enough to base efficient and successful management of a tourist destination on its basis (Ilic, Djukic & Nikolic, 2022) (Van Niekerk, 2017). To explain the activities of management on the success of the tourist destination, it is necessary to assume the following: - Activities of tourist management give certain results that affect the success of the tourist destination. - Success and changes can be measured here. According to the above bases, the success of a tourist organization can be measured in different ways: - longitudinal analysis, performed for at least two consecutive periods, - transverse analysis involves a comparative structure

of different tourist organizations at a given time, - pool analysis or group analysis, an organization in a given period. Each of these approaches has its advantages and disadvantages (Moutinho & Vargas-Sanchez, 2018). The longitudinal analysis offers opportunities to examine internal and external marketing activities and their operation in more detail. They are time and cost-intensive and highly reliable. However, there are some limitations as environmental influences or conditions are not investigated. The remaining competitive analyzes (transverse, pool) can compensate for the lack of longitudinal, in addition to the question of the number of costs here it is necessary to mention some other limitations. As mentioned earlier, each tourist community has its hierarchy of goals, which is a limitation in comparing tourist organizations. The research conducted so far is different. According to Bieger (1997), there are different concepts for defining the target sizes of destination development - even at the end of the last century, when tourism was not the same as today. The essence was in growth and development. Therefore, Bieger singles out the concept of qualitative or sustainable growth and states that it consists of five conflicting target areas: individual, subjective job satisfaction, leisure, housing - economic well-being - untouched nature - optimal satisfaction of authentic needs of guests - cultural identity, social satisfaction. Bieger, however, acknowledges that to date no such composition of indicators has been introduced in practice so, for the sake of simplicity, competitiveness (market position) is still expressed by the number of overnight stays (Slocum, Aidoo & McMahon, 2020)(Bieger, 1997). Some examples made in Switzerland show that the conclusions given by the data on the number of overnight stays and those derived from the composition of the indicators differ greatly. It is interesting to note some research done in Austria. First, about 1400 tourist organizations are classified according to their three-year development - the following types are defined: - "winners" are those who have achieved growth of over 2.5% in three years and those who have achieved growth of at least 2.5 in at least one year %, - those who have unchanged results, ie. organizations that kept their number of overnight stays + 2.5% and -2.5%, - "losers" were formed in 5 types that suffered a decline from -2.5% to over 30% (Blanzi, 2000) (Stojanovic, 2011). As success factors are very heterogeneous, additional research has been conducted on approximately 50 tourism organizations to better explain individual development patterns. The sum of components of success is presented in (Vazic et al, 2019): - raising the quality of accommodation, - optimal quality within certain categories, - high-quality hotel industry, - demand appropriate, the well-coordinated mix of accommodation, - offer for sports and entertainment, - renowned and attractive festivals, cultural and sports events, - price management, - more intensive and target group-oriented market policy with investments and quality, - intensified marketing efforts in the domestic and foreign markets, - seasonal extension activities and events with targeted propaganda, - intensive marketing of tourist companies, - engaged membership in various marketing cooperative bodies, - good cooperation with the tourist organization, - marketing regions. What is clear from the above research is the fact that the development of one destination cannot be attributed to only one factor. The common characteristics of the 'winners' were that they were not influenced by management at all (Ryan, & Page, 2012). The volume of overnight stays in the summer season is on average half that of the "losers", as well as the intensity of overnight stays, better distribution for two seasons, and a higher share of domestic guests. An attempt to explain the course of tourist destination development using subjective factors (guest) has so far been made only by Zins and his associates (Correia, Zins, & Silva, 2015). The assessment was made by interviewing guests in 1988 and 1991. A comparison of successful and unsuccessful organizations did not result in special results. Contrary to expectations, the contribution of some of the evaluated elements of the offer was negative in more than half of the cases (Zins, 1999). Previous research shows that under the condition of mutual spatial intertwining and mutual expansion of the influence of strengths and weaknesses of supply, development-homogeneous groups of organizations should show a higher correlation with the promotion of service quality than would be the case with observing the tourism organization alone (separately). The management of a tourist destination must offer the guest a conglomeration of services, of consistent and constant quality, although for many of its elements it does not have any means of quality control.

A re-visit - as an indicator for measuring guest retention, is not enough, as the phenomenon of the search for diversity has not been thoroughly researched. The meaning of a satisfied guest lies primarily in the multiplicative effect of positive verbal propaganda (Magas et al, 2018).

## 8. TASKS OF TOURISM ORGANIZATION AND DESTINATION MANAGEMENT

According to the dual role of the tourist organization, the tasks of management should also be viewed in a way - they are destination-oriented and organization-oriented (Muhammedrisaevna et al, 2020). The management of the tourist organization must, as well as the management of the company, set normative frameworks. Political bodies are responsible for the development of the region, place, and whole country. Therefore, they must formulate development goals for the population, economy, and society, from which tourism goals must also arise. This development picture must result from the cooperation of political bodies and the tourist organization because that ensures the influence of tourist significance in the process of making as well as a meaningful representation of tourist interests. On a strategic basis, the tourist organization must elaborate in detail in which direction it wants to develop the organization, build an internal organization, cooperate with associates within the organization, and ensure funding for cooperative tasks within the destination tourism (Shani & Pizam, 2012).

## 9. CONCLUSION

In the era of intense competition, the tourism industry must constantly search for new creative ideas to meet the needs of different segments of consumers and thus ensure their loyalty. The modern tourist market is characterized by extreme oversaturation. That is why managers in tourism must apply continuous innovation of the tourist offer. Today, tourists are increasingly striving for new and better products, new destinations, new experiences, activities, and experiences. New experiences before the outbreak of the global COVID-19 virus pandemic were the main motive for the decision to travel. Many tourism companies have increasingly completed their service using innovative technology to meet the demands of modern tourists. However, with the great crisis brought by the disease, tourism, like many other industries, has stalled, while tourist supply and demand have declined rapidly in the last two years (2020-2022). At the global level, there has been a decrease in people's interest in tourist departures and travel, and many smaller tourist organizations have shut down, while larger ones (tourism giants) have continued to fight for survival in the tourism market by introducing various measures). Already, at the beginning of 2022, the world was a little relieved, because the disease was slowly starting to subside. Managers have regained hope of restarting the business. Tourist offers began to gain in scope and diversity. On the other hand, there has been an increase in tourist demand. The growth and development of modern tourism depend on new ideas, new tourist experiences, and new tourist products. The ability to create innovation is one of the measures of success in turbulent market conditions. Innovation as a way to achieve competitive advantage includes a new approach to the market. For a new approach to the market, modern managers must be transformational leaders - jugglers who will rush to meet the changes without fear and adapt to those changes.

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## **Sustainable tourism in the protected areas: The evidence from Kopaonik national park**

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### **ABSTRACT**

*In modern societies, tourism has the potential to create many income options for the local communities, as well as to contribute to the physical and mental health of people in a variety of ways. Although enhancing the development of economic activities and employment possibilities for residents, tourism can also cause negative environmental effects. The purpose of sustainable tourism is to enable sustainable economic growth and development which is socially acceptable and harmonized with environmental capacities. To ensure sustainability, tourism activities in the protected areas, such as national parks, must be adequately planned, managed, and supervised. In this regard, the aim of the paper is to assess the indicators of sustainable tourism development in Kopaonik National Park in order to demonstrate that sustainable tourism is a desirable form of tourism in protected areas, as well as to point out the advantages and disadvantages of sustainable tourism in Kopaonik National Park. The analysis has revealed that by promoting awareness and investing in environmental preservation, tourism in protected areas has the potential to make a substantial contribution to economic development without compromising the quality of the protected areas in terms of biodiversity, geodiversity, and cultural and historical values.*

**Keywords:** *sustainable development, tourism, protected areas, national parks*

### **1. INTRODUCTION**

Sustainable tourism is defined by the World Tourism Organization (WTO) as a principle that not only meets the needs of tourists and tourist destinations, but also protects and increases tourism opportunities for future generations by fulfilling the demand of today's tourists and host regions, and

securing and growing development potentials (Bramwell et al., 1998). Additional legal, institutional, financial, and economic arrangements, modern technological and technical solutions, promotion and education, new ways of public communication and interaction, and adequate coalitions for sustainable development are all part of the concept of sustainable tourism development (Angelus et al., 2003). Protected areas are essential not only for preserving the planet's biodiversity but also for fostering human well-being (Jones et al., 2018). On the other hand, tourism is an essential way for protected areas to deliver cultural ecosystem services (Buckley, 2020). By promoting awareness and investing in environmental preservation, protected areas tourism has the potential to make a substantial contribution to biodiversity conservation (Leung et al., 2018). Furthermore, tourism has the potential to create many livelihood options for the local society, as well as to contribute to physical and mental health by assisting people in recovering from stress, lowering depression, increasing happiness, etc. (Harris et al., 2021). Tourism, on the other hand, can have severe environmental consequences if it is not adequately managed, such as biodiversity loss, decreased soil porosity, and social tensions (Zhong et al., 2020). Therefore, the purpose of sustainable tourism is to enable sustainable economic growth and development, which is harmonized with environmental capacities and socially acceptable. The need to involve the local population in the entire planning process of sustainable tourism development is the next very important item, because sustainable tourism development is carried out in their surroundings, and they feel negative or positive consequences (Stojanovic, 2006). As Kopaonik National Park has extraordinary ecological and cultural value, the state, organizations, and individuals have a responsibility to protect it. In this regard, the aim of the paper is to present the identification, assessment, and use of indicators of sustainable tourism development in Kopaonik National Park in order to demonstrate that sustainable tourism is a desirable form of tourism in protected areas, as well as the advantages and disadvantages of sustainable tourism in Kopaonik National Park. The purpose of the paper is to use the perceived benefits of sustainable tourism in Kopaonik National Park to work on modern and innovative projects, which will result in a set of internal and cross-border partnerships and contribute to sustainable development and the arrival of more tourists.

## **2. LITERATURE REVIEW**

To ensure sustainability, tourism activities in protected regions, such as national parks, must be properly planned, administered, and supervised (WTO, 2005; Cervený, 2022). Alternatively, such activities can have serious adverse repercussions, and tourism would worsen the situation in these locations. Although tourism can cause negative effects, it can also improve the development of economic activities and employment possibilities for residents (WTO, 2005). Protected areas are popular tourist destinations across the world, which are conserved with the aim to safeguard animal species and their ecosystems (Hasana et al., 2022). Sustainable tourism contains the transition, which results in the change from one state to another (Hall, 2008; Salerno et al., 2013). Furthermore, it must ensure a high standard of customer satisfaction and provide a valuable experience for visitors, boosting their understanding of sustainability concerns and encouraging them to participate in sustainable tourism initiatives. The goal of marketing efforts at the tourist attraction is to promote the essential aspects of the area, so that prospective visitors will be drawn to explore the location and use offerings within that location that should match their expectations (Gasic et al., 2014). National parks are the result of tourism's good environmental influence. They reflect features of tourism as a sustainable concept. In the administration of such tourism locations, sustainability is also an important approach. Tourism has both benefits and costs in protected areas and they are frequently combined in intricate ways. The protected area planner should provide the maximization of benefits and the minimization of expenses (Eagels et al., 2002). Protected areas are created primarily to protect a biophysical process or condition, such as a wildlife population, habitat, natural landscape, or cultural legacy, such as a community's cultural history. Tourists come to the protected areas to appreciate the values for which they were created, as well as to benefit personally. Protected areas are created mainly to protect a biophysical phenomenon, such as biodiversity, ecosystem, beautiful environment, cultural heritage, etc. (Eagels et al., 2002). Sustainable tourism planning and development processes strive to capitalize on visitor interest in order to improve economic prospects, safeguard natural and cultural

assets, and improve the quality of life for all parties involved (Eagels et al., 2002). Despite the good influence on local economic activities, excessive tourism has been found to have some negative consequences, including threats to endangered species and ecosystems (Belsoy et al., 2012; Zhang et al. 2022). The usage of the land, water, and energy, as well as the removal of natural vegetation and the concentration of waste, are all examples of adverse environmental effects that could lead to a progressive deterioration of wildlife ecosystems, either directly or indirectly (Belsoy et al., 2012). Tourist activities often disrupt biodiversity, causing changes in its natural tendencies and, in many cases, response to stress that have long-term negative consequences for its preservation (Tarlow & Blumstei, 2007). The kind and extent of negative environmental consequences are determined by the intensity and frequency of visits, tourist behavior, leisure activities, and site-specific biotic and abiotic characteristics (Sun & Walsh, 1998). The number of tourists is projected to grow in the coming years, but many protected areas throughout the world are unable to deal with the rising demand (Belsoy et al., 2012). In the context of tourism, sustainability includes the principle to have a balance between all stakeholders' economic, environmental, and social requirements (Rasoolimanesh et al., 2018). Efforts have been made to impose visiting limitations using several metrics in order to achieve sustainable development in protected areas. Metrics are critical in the development of sustainable tourism, as well as appropriate management instruments for dealing with a variety of difficulties (WTO, 2005). Tourists, local communities, corporations, governments, and non-governmental organizations are the five major stakeholders in the tourism industry, according to Lee and Hsieh (2016) and Rasoolimanesh et al. (2020). Tourists, communities, and resource managers are the most commonly stated stakeholders in protected areas (Nyaupane et al., 2020). On the other hand, some sustainable tourism metrics studies did not include tourists as crucial stakeholders (Rasoolimanesh et al., 2020). Complex dynamic tourism systems cannot be assessed in isolation from the ecosystem on which they rely, specifically those locations in or near ecologically sensitive areas like protected areas. Protected areas are multi-stakeholder, dynamic, responsive social-ecological systems that are influenced by societal, economic, and environmental elements as a result of the interaction of regional and international factors (Cumming & Allen, 2017). Hence, a community-based approach is important for developing dynamic strategies which involve nature conservation in relation to local place development processes and the tourist industry, hence integrating the opinions and interests of various stakeholders (Breiby et al., 2022). The considerable impact of the COVID-19 pandemic on sustainable tourism, such as protected areas tourism, emphasized the intricate interconnections among tourism, the local community, and protected areas, which should not be overlooked in order to increase protected areas' sustainability (Smith et al., 2021). Sustainable development attempts to create a balance between ecological sustainability and social development, with social justice at the forefront (Tsaur et al., 2006). Protected areas tourism is divided into two subsystems: the human system and the environment system (Huang & Huang, 2015). The human system and environment were employed as the basic concepts in tourism sustainability. For sustainable tourism measures, Lee and Hsieh (2016) pointed out two components: stakeholders and the natural environment. Both environmental and ecological dimensions, on the other hand, are just concerned with the natural habitat, neglecting the extremely significant and constantly evolving socio-cultural and economic settings.

### **3. CASE STUDY – KOPAONIK NATIONAL PARK**

Kopaonik National Park is the most tourist-friendly of all the protected regions in the Republic of Serbia. It falls under the category of complex tourist attractions, since it has many characteristics (gorges, canyons, forest complexes, numerous hydrographic objects – springs, lakes, rivers, geysers, waterfalls, etc., animals, and vegetation) that attract visitors, and it offers a variety of tourist activities. It comprises 11,800 ha and has a protective belt of 19,986 ha, including 689 ha of the wildlife refuge under special protection. The park is located at the peak of the mountain – the lowest point is 640 m above sea level and the highest point is 2,017 m above sea level (Pancicev vrh). Kopaonik National Park has the treatment of the most valuable ecological and tourist potential. It represents a unique natural unity, and a complex ensemble of exceptional forest ecosystems, geomorphological and

hydrographic phenomena, relict, endemic, and other rare plant and animal species, mosaic cultural and tourist requirements (from recreational, summer to winter, sports tourism). Hence, the recreation and tourism development in it are becoming the most important activities. As accommodation and catering facilities are one of the most necessary bases for tourist movements, they need to be taken into account when determining the level of tourism development. The accommodation and catering capacities can generally be divided into basic and complementary. The basic capacities include hotels, boarding houses, motels, tourist resorts, hostels, and inns, whereas complementary ones include accommodation facilities in the spa and climatic health resorts, mountain homes and houses, workers' resorts, children and youth resorts, camps, private rooms, boat cabins, and sleeping cars. Both groups of accommodation and catering facilities on Kopaonik have a long tradition, making this area more equipped, more meaningful, and certainly interesting for tourists. The basic accommodation and catering capacities are concentrated mainly in Suvo Rudište, but these capacities are also connected to the parts of Jarma and Srebrnac. On this stretch, a tourist centre was formed, consisting of the most luxurious and, according to architectural solutions, the most beautiful hotels. A special quality of the tourist centre is given by the immediate vicinity of the dense network of cable cars and a large selection of accompanying catering facilities along the ski slopes. Hotels in the tourist centre, both in terms of quality and richness of content, can only compete with hotels in Brzece on the western slopes of Kopaonik. When it comes to the distribution of accommodation capacities by region, it is evident that the largest number of beds is located in the Southwest and Kopaonik region, i.e., 39% of all beds. Unfortunately, tourist accommodation capacities have a very low utilization rate – 25-30% annually. Of the mentioned tourist subcentres in the area of Kopaonik National Park, only Suvo Rudište site was realized, with 10.000 beds (2.000 more than envisaged by the current plan). Out of the total planned 13.750 accommodation capacities, 10.250, i.e., 75%, were built. The construction of infrastructure at these tourist locations was achieved with 35% of the planned. In addition to the recorded, i.e., unregistered, there are categorized and uncategorized accommodations. Categorized accommodation on Kopaonik is divided into basic in the form of hotels, motels and resorts, and private, and it consists of houses and accommodation facilities with appropriate rooms and apartments. The total number of beds in hotels is 1.800, while apartment accommodation has approximately 700 beds.

### ***3.1. The indicators of tourist traffic in Kopaonik National Park***

The advantages of Kopaonik in comparison to other high mountains in Serbia are reflected in a variety of climatic and morphological characteristics, but most notably in its advantageous location in relation to the most distinct dispersions of domestic demand and the most important traffic flows in the valleys of Ibar, Zapadna Morava, Južna Morava, and other culturally and historically heterogeneous environments (spas and monasteries), which allows the possibility of combining different contents and creating a complex tourist offer. Great natural and geographical potentials, a strong material base built in the area of Ravni Kopaonik, and good marketing presentation on the domestic and foreign markets, have enabled a great realization of tourist traffic. Winter sports are the basic type of tourist offer, according to which Kopaonik has gained a reputation as a tourist centre of international importance, which has led to a significant concentration of traffic in the winter part of the year. In the following, based on data (taken from the Statistical Yearbook of the Republic of Serbia for the period 2010-2020), we will point out the state of tourism in Kopaonik National Park, a tourist centre with a tradition of 50 years. During this period, this tourist centre had ups and downs in the number of tourists. From the first season until today, the tourist centre Kopaonik has gone through various phases of construction and organization of the tourist and catering economy, which has contributed to the development, but also caused some stagnation. In the observed eleven-year period (2010–2020), the ratio of overnight stays and accommodation capacities in Kopaonik National Park, as well as the number of tourists and average stays are shown in Table 1.

*Table 1. Number of overnight stays, beds and number of overnight stays per bed in Kopaonik National Park in the period 2010-2020*

Year	Overnight stays	Tourists	Beds	Average stay	Overnight stays per bed
2010	233.912	57.990	4.325	4,0	54
2011	270.535	65.874	4.018	4,1	67
2012	298.432	67.175	4.480	4,4	67
2013	341.299	80.375	4.221	4,2	81
2014	323.133	72.433	4.437	4,5	73
2015	427.383	102.198	5.404	4,2	79
2016	495.753	117.942	4.563	4,2	109
2017	550.962	131.178	6.686	4,2	82
2018	535.594	132.080	6.070	4,1	88
2019	565.980	135.613	8.242	4,2	69
2020	432.038	104.370	7.189	4,1	60

*Source: Statistical Yearbooks of the Republic of Serbia 2011-2020*

In the analysed period, the largest number of overnight stays per bed was recorded in 2016, when there were 109 overnight stays per bed. While the lowest number of overnight stays per bed was recorded in the first year of observation, i.e., in 2010. The number of tourists and the number of their overnight stays is an important indicator of the development of a tourist destination, but it is also an indicator of the success of the business of the tourism industry. In the observed period, the lowest number of tourists was recorded in the first observed year (2010), when it amounted to 57.990. Also, the lowest number of overnight stays was recorded in 2010, when it amounted to 233.912. The largest number of tourists and overnight stays was recorded in 2019 – 135.613 and 565.980 respectively. The average stay of tourists on Kopaonik was four to five days. Domestic tourism is mostly developed on Kopaonik, and the majority of tourists are families and young people of higher and middle purchasing power. In recent years, the number of stays of guests from abroad has been recorded the most in the winter period, but that is still a negligible number, considering the real potential of this mountain massif. The causes can be found in the lack of a unique tourist product, negligible appearance on the tourist market, the poor offer of accommodation facilities, lack of appropriate summer offers, neglect of the presentation of the values of the National Park and surroundings, etc. Table 2 shows the number of arrivals and overnight stays of domestic and foreign tourists in the period 2010-2020 in Kopaonik National Park. According to the data from Table 2, Kopaonik National Park was visited by 135.613 guests, who spent 565.980 nights in 2019. Of this number, domestic tourists were represented with 79,2%, while the participation of foreign guests was 20,8%. For the observation period 2010-2020, the largest number of foreign guests was recorded in 2019 – 28.191. For the observed period, the lowest number of foreign guests was in 2010, which was 5.394, or 9,3%. Based on the obtained data, there is an increase in foreign guests by slightly more than five times, which means that it increased from 5.394 to 28.191. Based on the previously presented data, it can be concluded that in the past eleven years there was high participation of domestic tourists, 84,85% in total tourist arrivals.

*Table following on the next page*



*Table 2. Number of domestic and foreign tourists in Kopaonik National Park in the period 2010-2020*

Year	Tourists	Domestic tourists		Foreign tourists		Overnight stays	Domestic tourists		Foreign tourists	
		Number	%	Number	%		Number	%	Number	%
2010	57.990	52.596	90,7	5.394	9,3	233.912	210.032	89,8	23.880	10,2
2011	65.874	59.350	90,1	6.524	9,9	270.535	241.557	89,3	28.978	10,7
2012	67.175	59.345	88,3	7.830	11,7	298.432	261.477	87,6	36.955	12,4
2013	80.375	70.301	87,5	10.074	12,5	341.299	293.746	86,1	47.553	13,9
2014	72.433	61.496	84,9	10.937	15,1	323.133	271.763	84,1	51.370	15,9
2015	102.198	87.453	85,6	14.745	14,4	427.383	362.945	84,9	64.438	15,1
2016	117.942	97.571	82,7	20.371	17,3	495.753	406.778	82,1	88.975	17,9
2017	131.178	107.417	81,9	23.761	18,1	550.962	445.971	80,9	104.991	19,1
2018	132.080	105.760	80,1	26.320	19,9	535.594	423.999	79,2	111.595	20,8
2019	135.613	107.422	79,2	28.191	20,8	565.980	444.027	78,5	121.953	21,5
2020	104.370	85.858	82,3	18.512	17,7	432.038	339.021	78,5	93.017	21,5

*Source: Statistical Yearbooks of the Republic of Serbia 2011-2020*

The largest number of overnight stays in Kopaonik National Park was also recorded in 2019, of which the participation of domestic guests was 78,5%, and foreign guests 21,5%. The largest share of domestic guests was in 2010, when it amounted to 89,8%, out of a total of 233.912 overnight stays. Domestic guests had the highest number of overnight stays in 2017 (445.971), which was 80,9% of the total number of overnight stays. In the past period, the number of overnight stays of domestic guests ranged from 210.032 to 445.971, and foreign guests from 23.880 in 2010 to 121.953 in 2019. By analysing these data, we can conclude that the number of overnight stays of foreign tourists has also increased by about five times. Additionally, the COVID-19 pandemic had a negative impact on the number of overnight stays and tourists during 2020, according to the data from both tables.

#### 4. DISCUSSION

From the point of view of tourism, two types of space can be distinguished: the space in which the need for tourist movement is created or intensified and the space that is intended for the development of tourism. The space in which the need for tourist movement is created or intensified consists of: urban areas, industrial centres and mining basins. It is precisely the human environment and the space in which man performs his basic functions – housing and work. By the way, the human environment has become a contaminated area due to increasing pollution of air, water, soil, noise, etc., as well as increasing mental fatigue. Therefore, in these environments, the harmful impact of such spaces on the human organism is becoming more and more visible. In addition to taking measures to protect the human environment, primarily by limiting contaminating effects, man temporarily goes to a free, undamaged and healthy natural environment (tourism), which to a greater or lesser extent eliminates the harmful effects of urban space on the human body. The area intended for the development of

tourism is a free, undamaged and healthy natural environment which, thanks to its ability to have a beneficial effect on the human body, enables the development of tourism in these areas as an economic activity. Therefore, industry cannot be developed in the protected areas, as well as excessive urbanization, i.e., traffic, because otherwise the development of these activities would degrade the natural environment and thus suppress tourism. However, the excessive development of tourism can also jeopardize the primary properties of natural spaces, especially protected ones, intended for tourism development. This negative effect of tourism on the protected areas is reflected in the occupation of space by construction of: accommodation facilities (hotels, motels, caravans, tents, log cabins, etc.), food facilities (restaurants, cafes, bars, etc.), facilities for sale, warehouse space, roads and parking spaces, walking trails and recreational areas (ski trails, tennis courts, football, etc.). Therefore, the protection of nature must be viewed from the perspective of tourist development because the problem of space for the development of tourist activities may appear in the future. Today, tourist movements have become a mass form of circulation and direct communication. Therefore, tourism is of great importance not only for the economy, but also for health, culture, sports, politics and others. In addition, mass tourist traffic enables significant revenues to be generated in tourist destinations. However, in addition to these positive effects, mass tourism also causes certain negative effects. Due to the increased concentration of people in a smaller area, there are numerous communal problems (e.g., increased demand for water, electricity, parking space, generation of larger amounts of waste, etc.) that can negatively affect the quality of the environment. In addition to this, the increased negative impact on the environment is also increased by the increased use of means of transport by which tourists come to certain tourist places. Motorized tourism is one of the most important polluters of the environment. This huge mass of motorized tourists represents an economic boom for thousands of tourist places, but also a potential aggression that increasingly endangers the natural values of national parks with exhaust fumes, engine noise and, above all, insufficient driver awareness. This tourist influence has been noticed for a long time, which is why the development of tourist awareness must be intensified, as well as the adoption of certain legal regulations. Mass and uncontrolled tourist traffic can also endanger the environment. In some places, it is a matter of violating and even endangering the protection regime including permanent spatial degradation of the environment. The negligent attitude of tourists towards the environment, as well as certain professional services, is a source of the negative impact on the quality of the environment. Furthermore, bad habits of tourists and poor organization cause pollution of the natural space. Tourists pose the greatest threat to forest wealth when it comes to forest fires. Additionally, tourists cause direct forest fires in various ways (negligence of tourists in handling flammable materials, radiators, open flames, etc.).

## 5. CONCLUSION

Environmental protection and tourism are simultaneous phenomena that emerged at a period when industrialization started to endanger man and nature. The hassle of stuffy cities, traffic noise and the fatigue of uniform comfort are increasingly endangering man, which is why man decides to stay in nature. As a result, it is vital to harmonize the goals of nature protection with the degree and forms of tourism development. The fact that objects of protected nature are at the same time the most famous tourist values speaks of the close connection between these two issues. Tourism, on the other hand, is a significant "consumer" of the natural environment, i.e., a contributor to its degradation. Tourism has a negative effect on the environment by endangering space, tourist movements, tourist traffic, polluting and destroying nature. Those responsible for the protection of national parks and tourism, such as the Ministry of Environmental Protection and the Ministry of Trade, Tourism and Telecommunications, should formulate and implement a development plan that will include the adoption and implementation of measures that will enable the development of sustainable tourism in protected areas without compromising the quality of the protected area in terms of biodiversity, geodiversity and cultural and historical values. Also, another measure is to inform and educate tourists in an adequate way to see the need to protect national parks, as well as monitor and sanction all actions of tourists that can endanger nature in any way.

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## Entrepreneurial opportunities and possibilities for financing marketing activities using EU Funds

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### ABSTRACT

*The modern global market presents increasing challenges before entrepreneurs to find an effective set of marketing activities and communication channels. In today's conditions of high supply and demand, customers' activities connected with looking for bidders in the multitude of offers need to be timely and well targeted. Flexible offer creation and fast and innovative offer to potential customers are the key to a successful marketing activity. It is a special opportunity for micro and small businesses that possess significant flexibility in launching marketing activities as opposed to complex processes and multiple levels of management within large enterprises. In addition, the COVID-19 pandemic has prompted a significant step towards online commerce, online platforms and other forms of product and service promotion. Nowadays, it is possible to use EU funds to help entrepreneurs, since these tenders also include the financing of marketing activities. The paper analyses tenders announced so far, including the financing of marketing activities of the company, all for the purpose of promotion and greater visibility. In addition to promotion, funding through the funds also includes online activities such as online commerce, online promotion etc., which were of significant assistance to companies during the COVID-19 pandemic.*

**Keywords:** EU funds, marketing, marketing activities

### 1. INTRODUCTION

According to preliminary research, almost 85% of small entrepreneurs have not up to now used the services of a marketing expert, and every sixth entrepreneur says the reason for this is that they have not dedicated themselves to marketing. Up to 44% of entrepreneurs stress that funds are the most important asset for achieving better marketing results. One of the most common reasons for the lack of collaboration between small entrepreneurs and marketing experts is the price of these services, and 82% of entrepreneurs believe that **there is room for improvement in their marketing activities** (<http://www.expertiva.hr/blog/marketing-malih-tvrtki-istravanje>). Micro and small enterprises' marketing activities are featured through the application of both traditional and innovative forms of marketing (digital marketing), in a limited form due to lack of funds. However, applying financial support from EU funds would enable a more significant use of marketing. The aim of the paper is to analyse the possibilities of financing marketing activities using Calls for Tenders issued within European Union programmes. The paper uses qualitative research by analysing sources of financing for entrepreneurs intended for promotion and marketing available in the EU funds' operating grants scheme.

The financing can be direct, through targeted tenders aimed for this purpose, and indirect, by applying the marketing activities as incidental and supporting activities to the main project within the Call for Tenders, including preparatory activities for the implementation (strategies, plans) and the marketing activities themselves. The analysis of the financing possibilities is provided through an overview of the Calls for Tenders from **European Structural and Investment Funds**, i.e., through the Calls from the 2014-2020 financial period (including implementation by 2023), specifically from the **European Regional Development Fund**, **European Social Fund**, European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund.

## 2. PREVIOUS RESEARCH

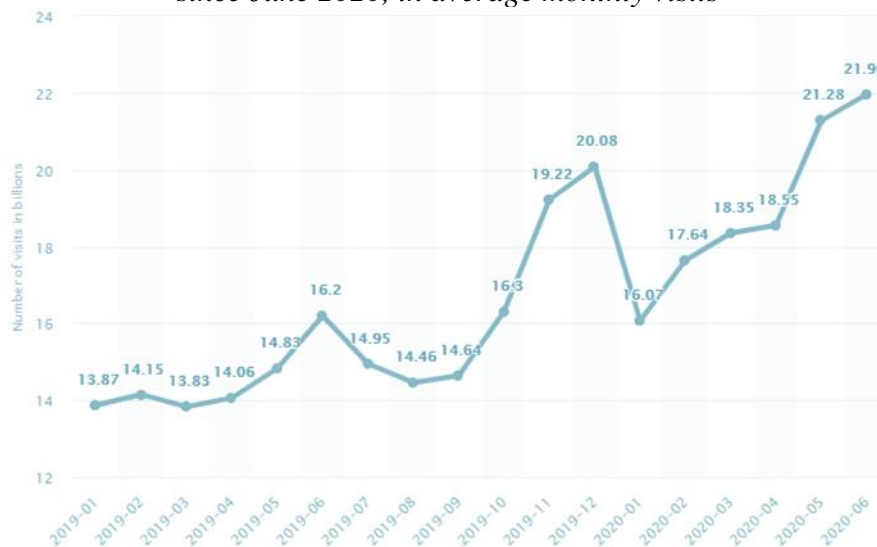
In their 2016 paper, Stanojević et al. explore the financing of entrepreneurship using EU funds. The paper provides an overview of the basic framework and possibilities of financing an entrepreneurship activity in the European Union. The paper also analyses and gives an overview of all the available funds from European funds that significantly contribute to financing entrepreneurship that creates new jobs, developing business competition and economic growth. In his 2016 research, Aralica reflects on the importance of financing innovation. The first part of the paper focuses on the research of the macro and micro levels of the determinants enabling the understanding of innovation financing, while the second part of the paper established the concept of innovation financing and its determinedness on the macro and micro level. Rončević, Gregorić and Horvat (2019) researched promotion as part of the marketing mix, and they offer the promotion of tourist destinations via virtual and augmented reality as an innovative solution. Final and graduate theses also feature the topic of financing entrepreneurship. In his graduate thesis, Dino Tepić analysed the influence of EU funds on entrepreneurship in the Republic of Croatia. The thesis provides an analysis of the activities and the successfulness of allocating financial means from the Funds and the possibilities and threats of future financing through EU funds. Furthermore, in her 2016 final thesis, Lega Barić also analysed EU funds financing, but her work is based on the analysis of the competence of the Republic of Croatia to efficiently use the financial aid funds at its disposal. The thesis defines the basic terms related to the Funds, analyses the principles of using the funds, the current period budget and the allocation of funds, the dynamics of contracting, paying, and receiving the funds. In this thesis “Utjecaj EU fondova na mala i srednja poduzeća” (Impact of EU Funds on Small and Middle-Sized Enterprises), Marko Gojević analysed aid programmes, including structural funds and European Union programmes HORIZON 2020 and COSME. It is visible that the topic of financing from EU funds appears both in final and graduate papers, as well as in researches. However, no research has yet focused on financing marketing activities from the Funds.

## 3. ENTREPRENEURS AND MARKETING ACTIVITIES

Commerce platforms have witnessed an unprecedented growth in global traffic between January 2019 and June 2020, exceeding even peak traffic seasons. In total, retail websites have achieved almost 22 billion visits in June 2020, compared to 16.07 billion of global visits in January 2020, which is one of the direct effects of the global coronavirus pandemics which has forced millions of people to the digital way of business and living.

*Figure following on the next page*

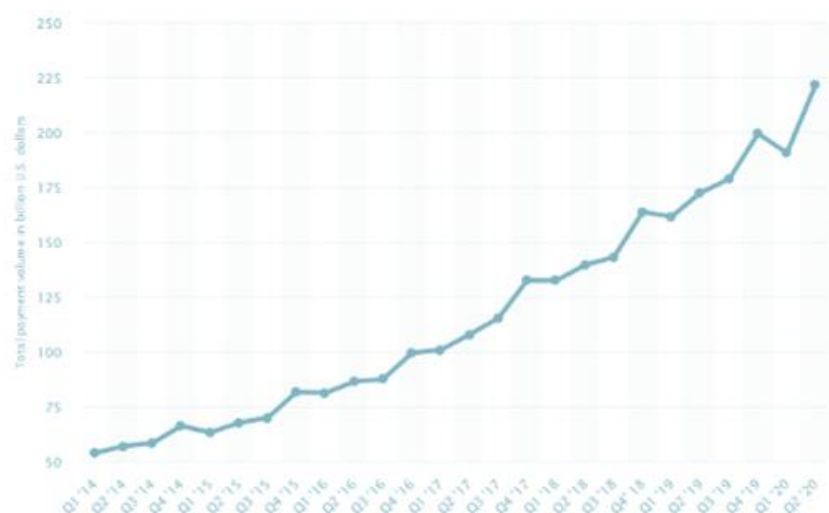
*Figure 1: The influence of the coronavirus on the traffic of e-commerce retail websites in the world since June 2020, in average monthly visits*



Source: <https://www.statista.com/statistics/1112595/covid-19-impact-retail-e-commerce-site-traffic-global/>

In the second quarter of 2020, the net amount of payments via PayPal amounted 221.7 billion dollars, which equals a 29-percent growth annually. This payment amount was generated through over 3.74 billion transaction PayPal processed in this period. In 2019, the annual volume of payment made by payment providers amounted 712 billion dollars.

*Figure 2: Total amount of PayPal payments from Q1 2014 to Q2 2020 (in billions of dollars)*



Source: <https://www.statista.com/statistics/277841/paypals-total-payment-volume/>

Purchasing goods or services via electronic transactions enables faster realisation, widens the selection, enables greater availability of information on products, but also enables the comparison of various offers; and has the potential of reconfiguring the influence of consumption, i.e. by reducing prices in distant regions. The digital transition and the fast development of the digital society and digital platforms has influenced the traditional marketing patterns. This led to a necessary change in general marketing strategies and in the main elements of the marketing mix. Companies conduct business in various conditions, have various competences and, therefore, have various approaches to certain functions within the company. Marketing activities of small and middle-sized enterprises have for a long time been approached within the context of existing traditional models based on the

practices of large companies. It was considered that the marketing activities were instinctively and sporadically performed by the owner, and that the usage of marketing efforts was unplanned due to the manner of operation of the managers. Owners of small and middle-sized enterprises have reservations towards marketing terms and ideas and rarely employ marketing experts. The unique characteristics and limitations of small and middle-sized enterprises are the key reason preventing the application of the traditional approach to marketing. The need arose for developing new approaches that would be better suited to SMEs (Butigan, Mahnić, 2011). Small enterprises and craftsmen usually use simple promotional means and activities (business cards, flyers, small posters, etc.). Such advertising is conducted locally, on a very limited area. One of the strategies available to small enterprises in extremely limited financing conditions is guerrilla marketing, i.e. using innovative marketing tools, tactics and strategies of shaping marketing activities (viral marketing, buzz marketing, ambush marketing, sensation marketing, covert marketing and content marketing) that trigger reactions from the corresponding market segment (using humour, shocking messages, placing the promotional message on an unusual place or by presenting the message using an atypical medium). Since it primarily relies on good ideas and creativity, as well as thorough marketing plan preparation and market segmentation, such marketing is extremely suitable for companies that generally do not have large budgets for such activities (Gregorić, Marić, 2017). Competitive tracking of trends in contemporary business requires possessing the tools and resources required for e-business, i.e. for the realisation of digital marketing, primarily using technical infrastructure (telecommunication network, internet, and the necessary IT equipment), as well as by using e-marketing tools: e-mail, Skype, SMS, web domains, search engine optimisation. It is also important to use tools such as Google AdWords to achieve better ranking on search engines and find business partners, and ad display, the so-called visual promotional messages that appear on portals. However, in addition to all of this, it is necessary to hire a professional marketing expert, either internally or externally. The American Marketing Association states that “consumers who do not wish to spend” are an increasingly interesting target group that have become the object of marketing efforts. Attracting consumers on websites and web shops requires certain initial investment in marketing. In addition to traditional methods, the switch to new methods of promotion and distribution is becoming a necessity. However, due to resource limitation, many entrepreneurs are finding it increasingly challenging to keep up with the competition using marketing activities.

#### **4. ANALYSIS OF CALLS FOR TENDERS AND THE POSSIBILITIES OF FINANCING PROMOTIONAL AND MARKETING ACTIVITIES VIA EU FUNDS**

Using qualitative research, i.e., the desk method of collecting secondary data, the calls for tenders and the possibilities of financing promotional and marketing activities of small and middle-sized entrepreneurs in the financial period 2014 - 2020 were analysed. The sample used were the Calls arising from the Operational Programme Competitiveness and Cohesion, the Operational Programme Efficient Human Resources, the Rural Development Programme and the Operational Programme for Maritime Affairs and Fisheries. In the 2014 - 2020 financial period, the Republic of Croatia had at its disposal a total of **EUR 10.731 billion** from the European Structural and Investment (ESI) Funds, out of which **EUR 8.452 billion** was envisaged for cohesion policy objectives, **EUR 2.026 billion** for agriculture and rural development, and **EUR 253 million** for fisheries development. The means from the ESI Funds (Cohesion Fund, European Regional Development Fund, European Social Fund, European Agricultural Fund for Rural Development, European Maritime and Fisheries Fund) are distributed towards achieving the goals identified within one strategic framework. At the national level, the Republic of Croatia has defined the strategic framework for the use of ESI Funds through the Partnership Agreement, operational programmes, Common national rules, and the Act on establishing institutional framework for the use of ESI Funds in the 2014-2020 period in the Republic of Croatia, as well as regulations prescribing the competences of individual bodies for each ESI instrument (<https://strukturnifondovi.hr/eu-fondovi/esi-fondovi-2014-2020/>).



**The Operational Programme Competitiveness and Cohesion 2014-2020 (OPCC)** is the main programme document for implementing EU's Cohesion policy and contributing to the **Investment for growth and jobs** goal. It is directed towards increasing competitiveness on the national and regional levels, *inter alia*, by providing support in the development of entrepreneurship. Within the priority axis of the 3<sup>rd</sup> stated **Operational Programme**, the main financing priorities refer to the promotion of entrepreneurship, facilitating the economic utilization of new ideas, ensuring better access to financing for SMEs; enabling a favourable environment for establishing and developing enterprises; supporting SMEs' capacities for growth on regional, national and international markets; enhancing SMEs' development and growth, and increasing SMEs' innovativeness. Some of the specific goals that featured tenders within the OPCC containing elements for financing marketing activity are 3a2 Enabling a favourable environment for establishing and developing enterprises, 3d1 Improved development and growth of small and middle-sized enterprises on local and foreign markets, 3d2 Improved innovativeness of small and middle-sized enterprises, and 9b1 Sustainable physical, social and economic regeneration of five deprived pilot-areas with the goal of reducing social inequality, exclusion and poverty (<https://esavjetovanja.gov.hr/Econ/MainScreen?entityId=16095>).

The following Table 1 analyses the supports for marketing activities within OPCC.

*Table 1 Supports for marketing activities within OPCC  
(Table ends on next two pages)*

Internationalisation of SMEs' business (Phase 1 and Phase 2)	The call is aimed at granting support with the goal of strengthening international SME competitiveness by making it easier to present their products/services to the international business community abroad and to introduce products to a new, foreign market and increase the possibilities of collaboration with foreign partners. Activities that are eligible for support include participation at international fairs outside of the Republic of Croatia, fees for participation at fairs, rental of exhibition space, presentation of SMEs within an international fair outside of the Republic of Croatia, foreign market research costs for the purpose of positioning products to a new market outside of the Republic of Croatia, creation of promotional material for participation at an international fair outside of the Republic of Croatia, participation at B2B business talks and/or meetings taking place withing international conferences/fairs outside of the Republic of Croatia; costs of external project management experts. The minimum amount of operative grants that can be awarded per entrepreneur is <b>HRK 100,000.00</b> , and the maximum amount is <b>HRK 1,000,000.00</b> .
WWW vouchers for SMEs	The call is aimed at granting support with the aim of encouraging SMEs to apply and improve their network solutions in the presentation and sales of their products and services, with the goal of strengthening the market position and increasing competitiveness of SMEs with the improved application of network marketing solutions with the aim of improving their market presence and the visibility of their products and services. Activities eligible for financing include the development and/or improvement of one or more domains, and refer to business websites, E-commerce and/or M-commerce. The minimum amount of operative grants that can be awarded per project is HRK 15,000.00, and the maximum amount per project is HRK 100,000.00.

Innovation by newly-founded SMEs, reference call number: kk.03.2.2.01.	<p>The call is aimed at granting support with the aim of fostering investment necessary for the commercialisation of research results, the development and innovation in business activities, and starting production based on applied solutions, with an emphasis on the commercialisation of products and services.</p> <p>Activities eligible for financing via this Call include the costs of marketing plans and the revision of business and marketing plans, as well as the operative marketing activity directly connected with the commercialisation of research results and the market launch of the product/service. Additional activities may include the engagement of a highly-qualified expert and other expert personnel.</p>
Integrator KK.03.2.2.05	<p>The call is aimed at granting support with the aim for supporting collaboration between SMEs, for them to establish supplier relations with Integrator enterprises and become part of their value chain in the targeted strategic segment, by creating new innovative products and services. In the implementation of the activity, the support includes covering the costs of external services such as market research and analysis, creating a marketing plan, product design, product/services promotion, etc.</p>
E-impuls	<p>The call is aimed at granting support with the aim of investment in the initial investment by micro and small entrepreneurs in connection with establishing a new business unit or expanding the capacity of an existing one in the production and production services sectors. Acceptable costs covered by the support include the costs of promoting the enterprise and the products.</p>
Construction and equipping of SME production capacities	<p>The call is aimed at granting support with the aim of improving the business development and technological readiness of SMEs that operate in identified acceptable activities, by fostering investment in the SME's capacities via initial investment in the construction and/or equipping of business units. Acceptable marketing activities refer to participation at fairs.</p>
SME production capacities' construction and investment in equipment	<p>The call is aimed at granting support with the aim of improving the business development and technological readiness of SMEs by fostering investment in the material and non-material property. The call envisaged supports for SMEs for their participation at fairs, and these can be granted exclusively under the condition that they are directly linked with the project for which the support is granted, whereby the intensity of the SME support for participation at fairs cannot exceed 50% of acceptable costs.</p>
Investment in the SME's production technology	<p>The call is aimed at improving the business development and technological readiness of SMEs by fostering investment in the material and non-material property, particularly via equipping of business units. The supports for SMEs include the possibility of financing participation at fairs, under the condition that they are directly linked with the project for which the support is granted, whereby the intensity of the SME support for participation at fairs cannot exceed 50% of acceptable costs.</p>
SME competence and development	<p>The call is aimed at granting support with the aim of improving the business development and technological readiness of SMEs by fostering investment in the SME's capacities, particularly through the construction and/or equipping of business units. The supports for SMEs for their participation at fairs can be granted exclusively under the condition that they are directly linked with the project for which the support is granted. The intensity of the SME support for participation at fairs cannot exceed 50% of acceptable costs.</p>

SUPPORT FOR DEVELOPMENT OF SMES IN TOURISM BY INCREASING THE QUALITY AND ADDITIONAL OFFER OF HOTELS	The aim of the call is to extend the tourist season and raise SME competitiveness in tourism, as well as the development of the tourist destination through the increase in quality and additional offer of hotels. Acceptable activities within this support to SMEs include costs for participation at fairs and presenting a new tourism product, if such is directly connected with the project for which the support is granted.
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Source: author's design per the *Operational Programme: "Competitiveness and Cohesion" 2014 - 2020, Call for project proposals*

The European Social Fund is one of the basic structural instruments of the European Union that provides support to member countries for investment in human capital and strengthening competitiveness of the European economy (<http://www.agrra.hr/esi-fondovi-2014-2020>). Operational Programme Efficient Human Resources 2014 - 2020 aims at contributing to the increase in employment and strengthening social cohesion in Croatia. The thematic goal Promoting sustainable and quality employment and support to the mobility of workforce backs the supports aimed at the reduction of current unemployment, increase of employment, promotion of the reintegration of unemployed persons to the labour market through the implementation of active labour market policies measures, etc.

The following Table 2 analyses the supports for marketing activities within the European Social Fund.

*Table 2 Supports for marketing activities within the European Social Fund*

Self-employment support	The support is aimed at unemployed persons for covering the initial costs of business and operation of the business entity. <b>The amount of the support is determined according to the future activity of the business entity and lasts 24 months. One of the acceptable costs within the support includes</b> costs of website development and advertising.
Support for business expansion	The support is granted to business entities that have already received support for self-employment, whose contractual obligations regarding self-employment have expired, and that plan to expand their business. Business expansion can mean opening a new business unit or facility, development of new products or services, starting a new activity, etc. The maximum financial support is HRK 100,000 in a period of 12 months. The support includes covering of marketing costs and advertising (website development and maintenance, domain lease, web hosting, advertising material printing, designing of billboards and signboards, internet advertising, logo design, branding, vehicle painting) up to a maximum of 20% of the support amount.
Self-employment support within the EU project "Self-employment of Croatian veterans, children of killed or missing Croatian veterans, children of Homeland War volunteers and children of Croatian disabled Homeland War veterans"	The support stems from the Specific Goal 8.i.2. " <i>Increase in sustainable self-employment of unemployed persons, particularly women</i> ". The target group of the Call are unemployed Croatian Homeland War veterans, unemployed children of killed or missing Croatian Homeland War veterans, unemployed children of volunteers from the Homeland War and unemployed children of Croatian disabled Homeland War veterans registered as unemployed with the Croatian Employment Service. The support is aimed at opening new jobs for persons from the target group with the purpose of self-employment, and the costs covered by the support relate, inter alia, to promotion and advertising costs. The costs can be supported with a maximum amount of HRK 12,000.00.

Source: author's design per the tenders within the European Social Fund

The Common Agricultural Policy (CAP) represents one of the most significant areas of activity of EU institutions. Rural development, as the second CAP pillar, is financed by the European Agricultural Fund for Rural Development (EAFRD). The goal of the programme is to foster competitiveness of agriculture, ensure sustainable management of natural resources and climate change, and achieving a balanced territorial development of rural areas, including the creation and preservation of jobs. The Rural Development Programme defines 20 measures that have the goal of increasing competitiveness of Croatian agriculture, forestry and food processing industry, as well as improving the living and working conditions in rural areas (<https://strukturnifondovi.hr/en/eu-fondovi/esi-fondovi-2014-2020/program-ruralnog-razvoja-2014-2020>).

*Table 3 Analysis of supports for marketing activities within the Rural Development Programme  
(Table ends on next two pages)*

Measure 3 “quality systems for agricultural products and food”, sub-measure 3.2 “support for informing and promotional activities performed by groups of producers on the inner market”, 3.2.1. <i>“Support for informing and promotional activities”</i>	The aim of the support is to increase consumer awareness on the existence and the specification of products produced within the system of protected designations of origin and protected geographical indications and the traditional specialties guaranteed system, as well as within the organic production scheme. <b>The users</b> of the measure are groups of producers, regardless of their legal form, primarily made up of producers or processors of the same product, which participate in the quality systems and associations of organic farmers whose members participated in the organic production programme. <b>Acceptable costs</b> refer to organising fairs, exhibitions, manifestations, and other dedicated promotional events for the promotion of products from the quality system and organic agricultural products, design of promotional materials, services of creation of promotional videos/films/photographs, recording and specialist IT services, website maintenance, rental of advertising space, setting up and removing billboards, informational and promotional activities via various communication channels.
Measure 4 “Investment in physical property”, submeasure 4.2. “Support for investment into processing, marketing and/or development of agricultural products”, 4.2.1. <i>“Increasing the added value of agricultural products”</i>	It is aimed at investment into the construction and/or equipping of facilities for sale and presentation of own agricultural products and investment in the purchase of mechanisation, utility vehicles, machines and equipment, purchase of land and objects for the realisation of the project. <b>The users</b> of the support are natural and legal persons who deal with or intend to deal with processing of products, and the support includes financing the introduction of a new and improved marketing tool.
Measure 6 “Development of farms and business”, submeasure 6.1 Supporting young farmers in starting a business”	Includes the financing of construction and/or equipping facilities for the sale and presentation of own products, including the costs of promoting own agricultural products. The users of the measure are young farmers categorised as micro or small entrepreneurs, between the ages of 18 and 40, who possess the required expertise and skills and who are for the first-time bearers of the farm, but have not been performing this role for longer than 24 months before submitting the Support request.
Measure 6 “Development of farms and business”, submeasure 6.2. <i>“Support for investment in starting non-agricultural activities in a rural area”</i>	Acceptable activities include tourism activities in a rural area, traditional, art crafts, souvenirs crafts, services in rural areas, processing/marketing of products. The support is granted for promotional activities related to the diversified activity. <b>The users of the measure are farms</b>

	that have been entered into the Farm Register as micro and small business operators; natural persons that are bearers or family members within a family farm who are starting a new non-agricultural activity in rural areas.
Measure 6 “Development of farms and business”, submeasure 6.3. “Support to the development of small farms”, 6.3.1. <i>“Support to the development of small farms”</i> .	Acceptable activities include the construction and/or equipping facilities for the sale and presentation of own products, including the costs of promoting own agricultural products. <b>The users of the measure</b> are small farms whose economic size is between EUR 2,000 and 7,999.
Measure 6 “Development of farms and business”, submeasure 6.4. “Investment in the development of non-agricultural activities in rural areas”, 6.4.1. <i>“Development of non-agricultural activities in rural areas”</i>	Acceptable costs include tourism activities in a rural area, traditional, art crafts, souvenirs crafts, services in rural areas; processing/marketing of products. <i>The measure includes the possibility of financing the constructions/reconstruction of facilities, equipping, marketing, and direct sales of local products.</i> <b>The users</b> are farms that have been entered into the Farm Register as micro and small business entities; natural persons that are bearers or family members within a family farm.
Measure 8 “Investments in the development of forest areas and improving forest sustainability”, submeasure 8.6 “Support for investments in forest technologies and the processing, mobilisation and marketing of forest products”, 8.6.3. <i>“Marketing of wood and non-wood forest products”</i> .	The measure includes investment in the promotion and informing on the wooden and non-wooden forest products, services and goods that make it easier for these products, services and goods to find their way to end-users. The users of the support are forest owners, associations of forest owners, micro, small and middle-sized enterprises. Acceptable costs include construction, reconstruction and/or equipping of a movable or immovable space/building for the presentation and sales of forest wooden and non-wooden products and forest services and for the promotion of forest public benefit functions, sustainable forest management and forestries sector, lease/rental of exhibit space for wooden and non-wooden forest products and forest services on specialised fairs and exhibitions, purchase and/or rental of multimedia devices and tools for the promotion of wooden and non-wooden forest products and forest services, creation and distribution of promotional materials on wooden and non-wooden forest products and advertising campaigns on wooden and non-wooden forest products and forest services.
Measure 9 “Establishing producer groups and organizations”, submeasure 9.1. “Establishing producer groups and organizations in the farming and forestries sectors”, 9.1.1. <i>“Establishing producer groups and organizations”</i>	The users of the measure are production organisations ranked as micro, small and middle-sized enterprises, and acceptable costs include the cost of joint placement of products on the market, costs of preparing the product for sales, concentration of supply, sales and supply for wholesale customers, purchase of information equipment and technology, cost of gross salaries of employees and/or costs of a joint venture.
Measure 16 “Collaboration”, submeasure 16.4 “Support for horizontal and vertical collaboration of participants in the supply chain for the establishing and development of short supply chains and local markets and for the promotion of activities in the local context, in relation to the development of short supply chains and local markets”. 16.4.1. <i>“Short supply chains and local markets”</i> .	<b>The users of the measure</b> are operational groups consisting of at least two partners, natural and legal persons entered in the Farm Register, producers’ groups and organisations, other natural and legal persons participating in short supply chains, who are not wholesale distributors or retail chains. <b>The measure includes covering the costs</b> of promotional activities, namely <i>current costs</i> (salaries’ costs) and <i>direct costs</i> , e.g. purchase/lease of kiosks, wooden houses, stands or other facilities for the sale of own agricultural products,

	equipment for retail sale, new utility vehicles for transporting load, development of a website for online sales of agricultural products of the operative group partner, costs of participation at local fairs/manifestations through the lease of exhibit spaces and stands, the cost of setting up and dismantling the stands; promotional activities in the form of logo design for the operative group, visual identity design of the operative group, design of posters, banner ads, etc.
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Source: author's design per the tenders within the Rural Development Programme

As a full member of the EU, the Republic of Croatia is entitled to use the support from the European Maritime and Fisheries Fund (EMFAF), the financial instrument of the European Union for helping in reaching the goals from the Common Fisheries Policy (CFP). The European Maritime and Fisheries Fund contributes to the promotion of competitive, environmentally and economically sustainable and socially responsible fisheries and aquaculture, encourages the implementation of the Common Fisheries Policy, promotes a balanced and inclusive territorial development of fisheries areas and aquaculture areas and encourages the development and implementation of an integrated maritime policy in a manner that complements the cohesion policy and the Common Fisheries Policy. The Operational Programme for Maritime Affairs and Fisheries of the Republic of Croatia for the programme period 2014 -2020 contains selected priorities and goals that should be achieved with the help of structural policy measures in fisheries, co-financed by the support from the EMFAF (<https://euribarstvo.hr/operativni-program-za-pomorstvo-i-ribarstvo-rh-za-programsko-razdoblje-2014-2020>).

*Table 4 Analysis of supports for marketing activities within the  
European Maritime and Fisheries Fund  
(Table ends on the next page)*

Measure 4.1. "Production plans and market placement"	The support is aimed at the preparation and implementation of production plans and market placement of fisheries' and aquaculture products, and it includes awarding operative grants for co-financing costs related to the preparation and implementation of production plans and market placement performed by producer organizations and associations of producer organizations - costs of market analysis and research, and the collection of data for the purpose of developing a Production and market placement plan, translation of documents (brochures, etc.), salaries (based on a labour contract) of the employees of the producers organization, purchasing of computers and office equipment, website development and maintenance. The user of the support is a producers' organization or an association of producer organizations.
Measure 4.3. "Market placement of fisheries and aquaculture products".	THE SUBJECT OF THE SUPPORT INCLUDES ACTIVITIES OF MARKET PLACEMENT OF FISHERIES AND AQUACULTURE PRODUCTS WITH THE GOAL OF DISCOVERING NEW MARKETS AND IMPROVING THE CONDITIONS FOR MARKET PLACEMENT AND CONDUCTING COMMUNICATION AND

	<b>PROMOTIONAL CAMPAIGNS. THE USERS OF THE SUPPORT ARE SUBJECTS IN THE FIELD OF FISHERIES, ORGANIZATIONS OF SUBJECTS (FISHERMAN COOPERATIVES, ASSOCIATIONS, FOUNDATIONS, CLUSTERS AND OTHER FORMS OF ASSOCIATIONS IN FISHERIES, PRODUCERS' ORGANIZATIONS.</b>
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Source: author's design per the tenders within the European Maritime and Fisheries Fund

## 5. CONCLUSION

Monitoring consumers' needs is a priority for successful business. In this context, it is necessary to apply marketing activities for the promotion of products and services. Investment in marketing is not an excess cost, but an investment in the future of business and a meticulously planned activity that requires an increasing amount of investment and seeking out innovative methods for reaching customers, with limited entrepreneurial resources (financial and related to personnel). The marketing challenges that small and middle-sized enterprises face are linked with their characteristics that include a limited customer base, limited marketing activity, knowledge and influence, dependency on the marketing abilities of the owner/manager, reactivity and poor knowledge of the possibilities and insufficient exploitation of available sources of financing. Operative grants from EU Funds are an opportunity for entrepreneurial investment in marketing activities and techniques and they include various traditional and contemporary digital forms of marketing activities, with the aim of strengthening entrepreneurial competitiveness and retaining existing and acquiring new customers on a dynamic market. The analysis of the possibilities of financing using operative grants from European Union Funds aimed at marketing activities (exclusive purpose or within other elements) using various types of Calls for Tenders casts a light on the width of possibilities in the types and manners of covering marketing costs (activities acceptable for financing), such as participation at fairs, organising fairs, promotional meetings, using advertisement space, decorating exhibit spaces, construction and equipping of presentation facilities, launching and developing websites and online shops, introducing contemporary digital platforms and tools, hiring personnel and external experts. With a quality selection and recognizing of potential activities, this can significantly contribute to the development of marketing business functions of the enterprise based on operating grants financed by EU Funds, all with the purpose of strengthening competitiveness.

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# The Role of Auditors' Competency in Public Expenditure Management the case of Ethiopia's Ministry of Finance and Public Procurement and Property Administration Agency

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## **ABSTRACT**

*The general objective of the study was to assess the role of auditors' competency in public expenditure management as evidenced by the Ethiopian ministry of finance (MOF) and public procurement and property administration agency (PPPAA). The study used a mixed-methods approach to collect qualitative and quantitative data using questionnaires and document analysis. The respondents for the surveys were chosen using multistage sampling techniques. Quantitative data were analyzed using multiple regressions on five-point Likert scaled items using SPSS and Process Macro, and the Andrew F. Hayes (2022) mediation analysis technique, while qualitative data was analyzed thematically. The result revealed that auditors' competency has a significant direct effect on the mediating variable audit quality and the dependent variable public expenditure management and has a significant indirect effect through the mediating variable on public expenditure management. The study established that auditors' competency has a deterrent effect on the parties involved in the expenditure management areas to work in line with legal frameworks. The ministry and the agency should work hard to enhance the competency of auditors through on-the-job and off-the-job training so that they can improve their public expenditure management.*

**Keywords:** *Audit quality, Competency, Expenditure, and Mediation*

## **1. INTRODUCTION**

Government auditing is essential for effective public sector governance. Auditors assist governmental organizations in achieving accountability and integrity, improving operations, and fostering trust among citizens and stakeholders by offering unbiased, objective assessments of whether public resources are used responsibly and effectively to accomplish desired goals. The supervision, intelligence, and foresight duties of governance are supported by the government auditor's position (IAA, 2006). The audit role has long been seen as an important aspect of government financial management, and it is increasingly being seen as a tool for enhancing government performance. Auditing is a broad term that encompasses a variety of tasks with varying goals (Diamond, 2002). The public-sector audit environment is one in which governments and other public-sector entities are accountable for the use of resources acquired through taxation and other sources in providing services to people and other beneficiaries (ISSAI, 2019). These organizations are responsible for their

management, performance, and resource consumption, both for those who supply the resources and for those who rely on the services, including citizens. Public-sector auditing contributes to the creation of favorable conditions and reinforces the expectation that public-sector entities and servants will carry out their duties effectively, efficiently, ethically, and in line with existing laws and regulations. In general, public-sector auditing is the systematic process of objectively gathering and assessing data to determine if information or actual situations meet predetermined standards. Public-sector auditing is critical because it offers information and independent and objective judgments about the stewardship and performance of public policies, programs, and operations to legislative and regulatory bodies, individuals in charge of governance, and the general public.

## **2. LITERATURE REVIEW**

### **2.1 Public Sector Audit**

According to (Bourn, 2018), in many countries, public sector audits are a long-standing and essential component of the accountability process. It is a democratically important activity that aids in the improvement of government functioning. A public sector audit investigates the government's economy, efficiency, and effectiveness. Audit institutions are increasingly being required to defend their own operations and demonstrate their outcomes and successes, particularly after substantial programs of public administration reform have been implemented around the world. Public Sector auditing should be designed as a capable scheme that can be used for checks and balances as well as fraud detection. Such schemes should assist government auditors in uncovering corrupt activities and avoiding significant potential economic shortfalls (Assakaf, 2018). The International Standards of Supreme Audit Institutions represent the function of public sector auditing (ISSAIs). According to the ISSAI's Basic Principles of Public Sector Auditing, all audits in the public sector have the same goals, but the precise aims and outputs may vary depending on the kind of audit. However, there are four principles that govern all audits in the public sector. First, public sector auditing delivers objective, unbiased, and trustworthy information based on adequate and appropriate evidence about public institutions to all prospective consumers. Second, it promotes accountability and transparency, resulting in continual improvement and continued trust in the proper use of public funds and assets, as well as public administration performance. Third, it enhances the constitutional arrangement's efficacy of those entities. Finally, by offering knowledge, extensive analysis, and well-founded recommendations for improvement, it generates incentives for change. Public sector auditing is a key institutional structure in modern government governance, with the primary goal of monitoring, ensuring, and assessing government accountability. Public sector auditing may improve accountability and decrease abuse of authority and resources by monitoring the functioning of government power, particularly how government funds are used. Public sector auditing, according to many nations' governance standards, may play a unique role in preventing corruption. Auditors, on the one hand, are adept at spotting falsified financial reporting, making them useful in uncovering the underlying wrongdoing. On the other hand, the deterrent impact of Public sector auditing may be amplified by making audit results public and holding individual officials accountable (Lin, 2012). The value of Supreme Audit Institutions in improving public financial management and governance is well acknowledged. Supreme Audit Institutions are an important aspect of a country's financial oversight and accountability systems. They are independent state agencies that conduct external audits of public sector organizations and are thus one of the most important tasks in the formal system of financial accountability and public sector governance. (Africa Development Bank and World Bank, 2010) As a result, strengthening Supreme Audit Institutions can significantly boost government effectiveness.

### **2.2 Auditors' Competency**

Competency refers to an individual's ability to do a job or activity correctly based on their educational level, professional experience, and the staff's commitment to continued professional development. The competence of auditors influences the effectiveness of auditing in a company. It improves the auditors' capacity to use a systematic and disciplined audit methodology to increase the efficacy of

IA. The IA office has a continual problem with poor technical staff expertise and significant employee turnover, which limits its ability to deliver effective support to management (Yismaw Dessalegn, et al. 2007). Competencies are technical and non-technical elements possessed by someone, such as attitude and conduct, soft skills, and hard skills. Based on the views of a number of experts, Auditor competencies include the knowledge, competence, ability, and appropriateness of personal behavior required to fulfill his or her job effectively and objectively. Practical Competency (showing a set of tasks in an authentic context), Foundational Competency (understanding that shows the basis of practical competence when it is an action to be taken), and Reflexive Competency are some of the dimensions and indicators that may be used to measure competencies (that demonstrate the ability to integrate performance and work understanding, and the results can show the ability to adapt to situations that change quickly and to be responsible) (Taufiq Supriadi, S. Mulyani, Eddy Mulyadi Soepardi and Ida Farida, 2019).

### **2.3 Public Sector Auditors Independence**

The audit role in organizations emerged from a need to seek further assurance from the executive board and senior management on the efficacy and control of operations. Designing appropriate risk management, control, and governance mechanisms is essentially the responsibility of management. Auditing arose from an executive's desire for additional assurance on the quality of these operations from a neutral and objective source. Auditing contributes to the achievement of the organization's objectives in this way, and it has subsequently been incorporated into many businesses' governance models (M.J.W. van Twist, M. van der Steen, R.W.A. de Korte and A. Nuijten, 2015). The necessity for organizational independence and impartiality, which can enable the audit activity to do work without interference from any party for the audit assignment, is another component that may contribute to a successful government audit activity. (Zulkifli.etal. 2014) internal audit independence and objectivity apply to both assurance and consulting services provided to the company. Independence and objectivity are strongly linked when the audit service is delivered free of constraints that might jeopardize objectivity and with no major quality compromises.

### **2.4 Public Expenditure**

Governments, development agencies, and the general public have shown a significant increase in interest in public expenditure concerns in recent years. Governments are becoming more aware of the value of public spending as a vehicle for attaining their goals, notably in the area of poverty reduction. Over the last three decades, countries with equal revenues and growth have had quite varied effects on poverty. These disparities are due in part to inequalities in governments' abilities to allocate resources to poor-supporting initiatives. This is exacerbated by inconsistencies in the delivery of public services to the poor, particularly fundamental social services. The answer does not always rest with spending allocations; the policy and institutional framework for spending management and service delivery is frequently as important as, if not more important than, spending allocations (DFID, 2001).

### **2.5 Public Expenditure Management**

PEM has a tendency to promote three outcomes: aggregate fiscal discipline, allocative efficiency, and operational efficiency. Aggregate fiscal discipline refers to the alignment of government spending with total receipts (domestic revenues plus a sustainable level of foreign borrowing); in other words, it implies maintaining government spending within reasonable bounds. To put it another way, don't spend more than you can afford. Allocative efficiency, on the other hand, relates to the alignment of budgetary allocations with strategic priorities: are budgetary resources going to programs and activities that advance the country's strategic goals? Is the government spending money on the "right" things, to put it another way? Finally, operational efficiency relates to the delivery of public services at a fair cost and of acceptable quality. The question is whether the country is receiving the best value for its money. The attainment of these goals is hampered by a slew of underlying issues (Campos, 2001).

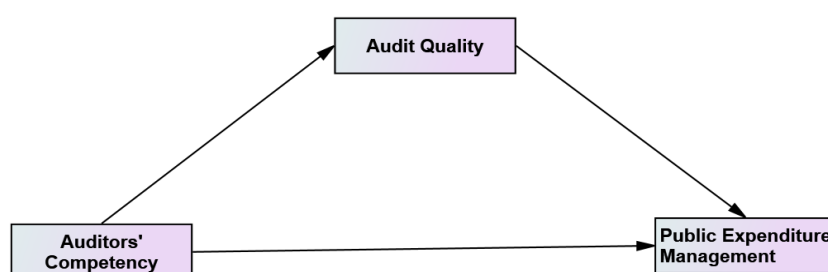
## 2.6 PERCEPTUAL DETERRENCE THEORY (PDT)

When deciding whether or not to participate in unlawful or immoral action, decision-makers weigh both the perceived risk of detection and the probability of punishment, according to PDT.

	coeff	se	t	p	LLCI	ULCI
Constant	2.9841	.2702	11.0440	.0000	2.4497	3.5185
Auditors' competency	.2202	.0708	3.1115	.0023	.0802	.3601

Further, PDT claims that deterrence is most likely to occur when both of these components are considered to be present and adequately high. (Jessica L. Buchanan, Benjamin P. Commerford, and Elaine (Ying) Wang, 2019) Prior accounting research shows that enhanced auditor scrutiny can dissuade managers from making risky accounting decisions, which is consistent with PDT, because auditors have both the power to discover and restrain risky accounting decisions (i.e., penalize).

### Simple Mediation Model



### Data analysis

Model: 4

Y: Public Expenditure Management

X: Auditors' competency

M: Audit Quality

Sample

Size: 136

OUTCOME VARIABLE:

Audit Quality

**Table 1 Model Summary**

R	R-sq	MSE	F	df1	df2	p
.2596	.0674	.0795	9.6817	1	134	.0023

**Table 2 Model**

Standardized coefficients

coeff

Auditors competency .2596

OUTCOME VARIABLE:

PEM

**Table 3 Model Summary**

R	R-sq	MSE	F	df1	df2	p
.7743	.5996	.0171	99.5707	2	133	.0000

**Table 4 Model**

	coeff	se	t	p	LLCI	ULCI
Constant	1.3475	.1734	7.7719	.0000	1.0045	1.6904
Auditors' competency	.3502	.0340	10.2956	.0000	.2829	.4175
Audit Quality	.2666	.0401	6.6476	.0000	.1873	.3459

**Table 5 Standardized coefficients**

	coeff
Auditors' competency	.5850
Audit Quality	.3777

TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y

**Table 6 Total effect of X on Y**

Effect	se	t	p	LLCI	ULCI
.4089	.0378	10.8250	.0000	.3342	.4836

**Table 7 Direct effect of X on Y**

Effect	se	t	p	LLCI	ULCI
.3502	.0340	10.2956	.0000	.2829	.4175

**Table 8 Indirect effect(s) of X on Y:**

	Effect	BootSE	BootLLCI	BootULCI
Audit Quality	.0587	.0236	.0149	.1067

#### ANALYSIS NOTES AND ERRORS

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

### 3.1 Mediation Analysis

The researcher wants to know if a suggested mediator, M, can actually explain the impact of X on Y. Estimating the indirect effect through the mediator M is used to answer this question (Hayes 2013). The study assessed the mediating role of Audit quality on the relationships between Auditors' competence and Public expenditure management. The result revealed a significant indirect effect of auditors' competency on public expenditure management (0.0587,  $t=10.2956$ ), Supporting H1. Furthermore, the direct effect of Auditors' competence on public expenditure management in the presence of the mediator was also found significant ( $b=0.3502$ ,  $p<0.001$ ). Hence, Audit quality partially mediated the relationship between auditors' competency and public expenditure management. It is a complementary mediation rather than a competitive mediation since both direct and indirect effects have the same positive coefficients.

*Table following on the next page*

**Table 9 Mediation analysis summary table**

Relationship	Total Effect	Direct Effect	Indirect Effect	Confidence Interval	t-Statistic	Conclusion
Auditor competency->Audit quality->Public expenditure management	0.4089 (0.000)	0.502 (0.000)	0.0587	Lower Bound Upper Bound 0.0149 0.1067	10.2956	Partial Mediation

### 3. CONCLUSION AND RECOMMENDATION

The study established that the better the audit quality of a government organization, the better its public expenditure management. Even if there are different factors that affect the efficiency and effectiveness of government expenditure management, auditors' competency has a significant influence on the parties who are involved in the public expenditure management aspects of government activities by creating a deterrent effect to work in line with legal frameworks.

Recommendation are as follows:

- The government should allot appropriate resources to improve the audit institutions in order to adequately execute its responsibility to guarantee that public-sector organizations fulfill their intended purpose without wastage of resources, misappropriation, or corruption.
- *The audit institution should work hard to strengthen the competency of auditors through on-the-job and off-the-job training so that they can improve their public expenditure management.*
- *According to the international audit standards, auditors should get at least 40 hours of training annually so that they can perform their duties without any difficulties.*
- *The audit institution work with stakeholders to create an opportunity for the auditors to upgrade their knowledge and skills through training and development programs.*

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## Heading Towards the New Great Recession? A Confidence Research Perspective

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### **ABSTRACT**

*This paper's objective is to further stimulate economists' motivation to carefully consider a class of economic sentiment indices which measure people's beliefs, perceptions and expectations regarding the economy. As the acknowledged leading indicators of economic activity, they have the potential to timely point to the upcoming economic distress. However, given their potential, they are still relatively underused. The from-scratch empirical analysis in this paper detects the recent unfavourable developments in the key sentiment indices, particularly the ones measuring the confidence of consumers. Considering consumer sentiment indicators, the situation in the US and the European countries now seems even worse than during the Great Recession while the perceived uncertainty is building up. As the origin of the new crisis might lie in the sector of consumers – the drivers of final aggregate consumption – policymakers should take their sudden confidence drop seriously and accordingly develop near-future strategies to timely overturn these adverse trends.*

**Keywords:** *Business and Consumer Survey, economic sentiment, Consumer Confidence Indicator, recession*

### **1. INTRODUCTION**

A common practice among economists is to announce a recession when they detect a slowdown in economic activity for at least two consecutive fiscal quarters. Defined in that manner, the most recent recessionary episode was globally experienced due to the Covid-19 pandemic, but it was rather transient in nature. After the negative growth rates in the first half of 2020, GDP in the US and Europe soon got back on track, indicating a fast, sometimes popularly called 'V-shaped recovery'. However, just as the economies took a break from the mentioned short-lived recession, they started to show new signs of weakening. The speedy US economic recovery in the third quarter of 2020 subsided quickly, with GDP now falling by 1,6% in the first quarter of 2022. In line with the standard business cycle theory, a periodical downturn is not necessarily a red flag, unless it is accompanied by some other unusual and troubling signals. And currently, the most worrying fact is that the US inflation in June 2022 took the value of even 9,1%, the highest since late 1981. Persistent inflation in the first several months of 2022 represents a problem for the Eurozone too, where it is also approaching a double-digit figure, mainly due to the rising prices for food, energy, fuels and transport. In addition to these unfavourable inflationary trends, bothersome news comes from the world stock markets. As the US stock market in the first half of 2022 performed the worst in over fifty years (Barba and Vaughn, 2022), the world anxiously awaits the data for the second quarter US GDP, expected to be officially published in late September. European Union's slight current slowdown, on the other hand, has not manifested in a negative GDP growth rate yet. Even though the final consumption of households has started to decline in the first quarter of 2022, other favourable GDP components (primarily investments and trade balance) are still strong enough to keep the EU GDP above water. Moreover, Europe's unemployment levels are also relatively low, creating the impression that rising



inflation is the only momentary economic problem. Still, history has recently shown that, in today's globalised world, the shocks of the crisis erupting in one country could abruptly spill over to other previously well-functioning economies. Although economists typically turn to official statistics for an objective assessment of the state of the economy and prospects for the future, it is probably not enough. The Great Recession clearly demonstrated that the mainstream economic models, relying solely on standard economic indicators, fail at their primary purpose – to explain and anticipate economic developments. They have especially failed at foreseeing the discrete turning points in the business cycle. However, a potential solution came into sight when a group of economists started more actively incorporating the psychological elements in their models. The advantage of behavioural economic models lies in accounting for variables that regard real individuals without making strict assumptions about made-up economic agents. In many cases, it was just the right thing to do to create a more realistic economic framework. The main aim of this paper is to contribute to boosting economists' motivation to more carefully consider a class of economic indicators which measure sentiment – people's beliefs, perceptions, attitudes and expectations regarding the economy. Namely, these indicators had been sending warning signs before 2008, suggesting that an atmosphere of caution and discouragement was present among economic agents beyond the good-looking macroeconomic outlook. Moreover, there are claims that sentiment is even more critical determinant of future economic trends than objective factors (Silvia and Iqbal, 2011). Paying close attention to these subjective indicators could, therefore, point to the potentially atrocious upcoming economic events, which is especially important in times like today. The remainder of the paper is structured as follows. The second part provides an overview of the contemporary research on the class of economic sentiment indicators and tries to motivate the greater usage of tendency surveys results. The third part brings the empirical analysis of the recent trends in confidence indicators, while the fourth chapter discusses the obtained results. The final chapter concludes the story.

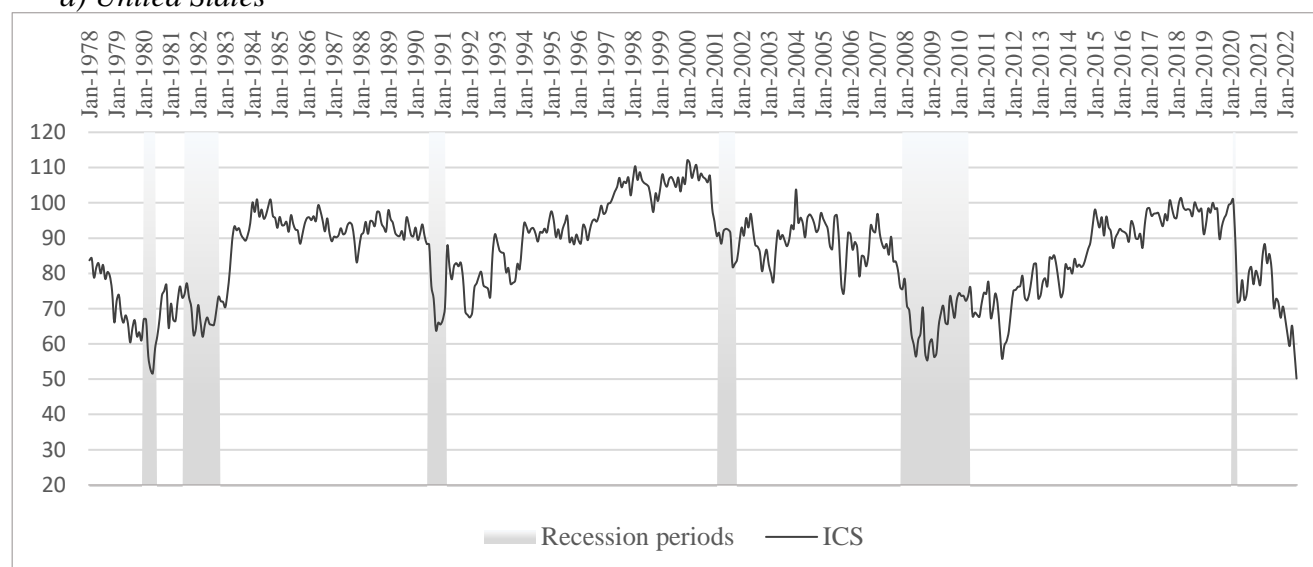
## **2. CONTEMPORARY CONFIDENCE RESEARCH REVIEW: WHY SHOULD ECONOMISTS CLOSELY OBSERVE ECONOMIC SENTIMENT INDICATORS?**

More than 70 years ago, scientists from the US University of Michigan gathered around professor George Katona, who is today considered the originator of the confidence surveys concept. They started carefully observing consumers' opinions via household surveys to finally realise these data could do much more than just describe the consumption attitudes of a handful of people – when adequately collected, they could announce future macroeconomic trends. More specifically, consumer surveys tend to inquire a representative sample of consumers about their assessment of their financial situation, expectations about future economic prospects, and own buying intentions. Economists figured that consumers' current state of mind is likely to reflect in their upcoming financial decisions, and measuring economic sentiment in this way enabled a solid starting point to create credible survey-based leading indicators of economic activity. Later on, this idea spread globally and resulted in monitoring consumers' habits in almost every part of the world. In the 1960s, Europe launched the Joint Harmonized EU Program of Business and Consumer Surveys (BCS) to closely watch the sentiment of economic agents in the most vital sectors of national economies. Ever since, BCS have been conducted in all the EU Member States and from 2016 in the EU accession candidates (Albania, Montenegro, Macedonia, Serbia and Turkey). Besides surveillance, the BCS program nonetheless has a higher purpose. It is also one of the steps toward the general integration of the EU countries (Čižmešija, 2008). Confidence surveys have experienced growing popularity due to their many advantages. The data stemming from these surveys are publicly available and highly frequent (as they are collected monthly and quarterly), allowing scientists to specify qualitative information quantitatively. However, the main advantage lies in something else. As official statistical data on key economic indicators, such as GDP or final consumption, is usually available with a considerable delay, analysts are regularly faced with a few months of uncertainty and guessing until the figures are finally published. On the other hand, considering the nature of survey-based research, sentiment indicators data are declared in the same period (month or quarter) to which the data refer. This means that confidence surveys provide almost the same piece of information on macroeconomic

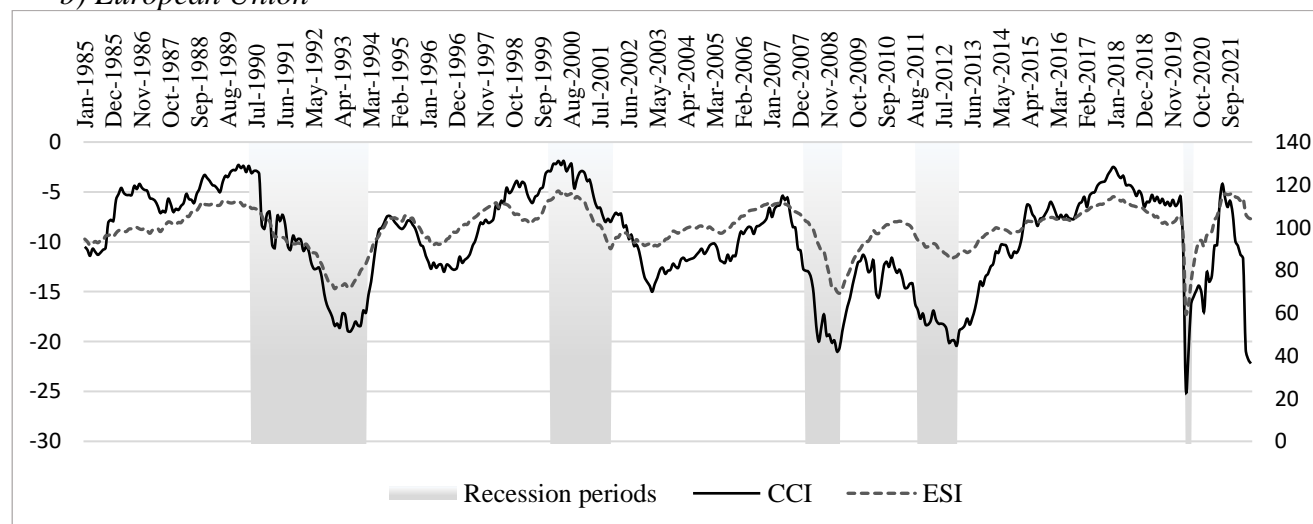
developments but much earlier, which is why they have been used for short-term economic forecasting. Survey-based indicators are specifically designed to track and foreshadow corresponding economic time series. For example, the US Index of Consumer Confidence (ICS) tracks final consumption, and the same job across the Atlantic has its European counterpart, Consumer Confidence Indicator (CCI). Another relevant and heavily used BCS indicator is the European Sentiment Indicator (ESI), pursuing the GDP series. Since the timely publishing of confidence data looked highly promising from the beginning, much scholarly literature has been devoted to examining the forecasting ability of the related indicators and determining if they could announce significant changes in the business cycle. Before turning to essential scholarly findings, Figure 1 should provide just the initial look at the performance of these indicators during the past several decades.

**Figure 1.** Confidence indicators and significant recessions in the US and the EU

*a) United States*



*b) European Union*



*Note: CCI is measured in points (left scale), while ESI is measured in index points (right scale)*

Source: Author

To graphically detect if there is a correlation between waves of sentiment and general economic activity, Figure 1 thus depicts the ICS, CCI, and ESI developments along with recession episodes in the US and Europe. Only the severe and lingering recessions have been singled out here to highlight how consumers' optimism/pessimism has coincided with the most important economic and political events in recent world history.

For example, the turbulent early 1990s marked the end of the Cold War, the Soviet Union's disintegration and an oil shock due to the Gulf War. At the same time, with the slowdown of large industrial economies such as Japan, the US, the United Kingdom, France and Italy, central banks in Europe began to tighten monetary policy for preventive reasons (Hutchison, 1991), while the recession in Europe culminated between 1992 and 1993 with the crisis of the European Exchange Rate Mechanism (Jonung and Hagberg, 2005). The recession in the early 2000s resulted from the terrorist attacks in the United States, triggering Western fear of Islamic extremism, in addition to the Enron scandal and the introduction of the common currency in the EU. However, the most severe world economic crisis in recent history happened after the 2007 US financial collapse, and the second wave of the Great Recession erupted in the EU between 2012 and 2013, manifesting as the sovereign debt crisis. 2020 brought the latest economic downturn related to the Covid-19 world pandemic. The graphic representation in Figure 1 shows that every decline in aggregated confidence coincides with recessionary episodes, confirming similar earlier findings in Matsusaka and Sbordone (1995). And not just that, in most cases, it even precedes the decline in economic activity, indicating that each sudden and unpredictable economic downturn was foreshadowed by a milder or stronger decline in peoples' optimism. The explanation is straightforward: if economic agents are optimistic about economic prospects, it increases their propensity to consume and in turn determines aggregate consumption, production and unemployment levels (Westerhoff and Hohnisch, 2007; Bachmann and Sims, 2012). Vice versa, economic agents start to pull back in times of excess anxiety and rising uncertainty. However, the determinants of economic sentiment do not have to be purely economic. For example, Doms and Morin (2004) argue that economic sentiment indicators have come under scrutiny due to war events, terrorist attacks, and accounting scandals. Scholars have therefore had a strong enough argument to thoroughly inspect the predictive properties of confidence indicators in all the different settings. For example, Carroll et al. (1994), Matsusaka and Sbordone (1995) and Bram and Ludvigson (1998) made noteworthy studies for the US, all confirming that Michigan ICS has the power to predict changes in personal consumption and helps to reduce forecasting errors in prediction models. Similar findings are associated with multi-country research, usually observing more European or several world economies (e.g. Nahuis, 2000; Cotsomitis and Kwan, 2006; Taylor and McNabb, 2007). Moreover, some studies further confirmed that consumer confidence not only summarises the information already contained in standard economic indicators but has autonomous predictive power (e.g. Golinelli and Parigi, 2004). As the literature increasingly began to provide evidence of the close connection between sentiment and economic trends, even despite the lack of complete scholarly agreement, Sorić (2018) argues that the impact of economic sentiment on the GDP trends today is a stylised fact of modern macroeconomics. Adamowicz and Walczyk (2013) analysed the main quantitative indicators of the state of aggregate economic activity (GDP, private consumption, industrial production, construction and retail) and then aligned them with corresponding qualitative (confidence) indices such as ESI or CCI. The results show that the crisis is deeply embedded in the minds of economic agents, and an intense fear of the future is expressed in their pessimistic sentiment. In a complementary manner, Erjavec et al. (2016) additionally include the variable of economic sentiment in their model to assess the possibility of predicting Croatian recession episodes. Again, ESI significantly contributed to the model's accuracy, which made it clear that psychological factors largely govern economic cycles. Their importance is even greater in times of economic distress, speaking in favour of the popular premise that recessions are (at least to some extent) psychologically conditioned. Recent evidence of some ex-post studies explicitly showed that confidence indicators could predict the 2008 recession in the G-7 countries at a relatively early stage, although they were somewhat less successful in determining the intensity of future economic losses (Astolfi et al., 2016). Furthermore, van Aarle and Moons (2017) emphasise that economic sentiment and uncertainty had a vital role in explaining and forecasting economic changes in the euro area during the world financial crisis, as well as in the crisis in the 1930s. The arising question is, why are the economists still somewhat reluctant to use confidence indicators in their prediction models?

Although the academic community has not yet reached a consensus on all the specifics of confidence indicators, the up-to-date scholarly research provides credible reasoning to carefully read the signs written in sentiment data. This is precisely the goal of this paper.

### 3. EMPIRICAL ANALYSIS OF THE MAIN CONFIDENCE INDICATORS' LATEST TRENDS

The recent spread of media headlines speculating about the new crisis prospects has mainly been supported by the recent GDP, unemployment and consumption figures. However, we should be aware that officially published key macroeconomic series are always a step behind. For example, as we are approaching the third quarter of 2022, we still wait for Eurostat to announce the definitive first-quarter data, as it is still in for many European countries proclaimed provisional. In this manner, we cannot be timely informed about the developments in the economic environment and provide credible enough analysis. Delayed information is something we can (and must) live with in good times, but it nonetheless represents a serious obstacle during difficult times when it is crucial to react promptly to annul as many consequences as possible. With that in mind, a set of different leading economic indicators at hand can do nothing but help. Let us first have a look at the US and EU confidence indicators which are broadest in scope.

**Table 1.** The latest data on the US and EU broadest confidence indicators, June 2021 – June 2022

	June 2021	May 2022	June 2022	Yearly change (%)	Monthly change (%)
University of Michigan Index of Consumer Sentiment (ICS)	85,5	58,4	50,2	<b>-41,3%</b>	<b>-14,0%</b>
The Conference Board Consumer Confidence Index (CB-CCI)	128,9	103,2	98,7	<b>-23,4%</b>	<b>-4,4%</b>
Economic Sentiment Indicator (ESI)	114,5	104,2	102,5	<b>-10,5%</b>	<b>-1,6%</b>
Employment Expectations Indicator (EEI)	111,6	112,2	110,6	<b>-0,9%</b>	<b>-1,4%</b>
Economic Uncertainty Indicator (EUI)	13,1	22,6	23,9	<b>82,4%</b>	<b>5,8%</b>

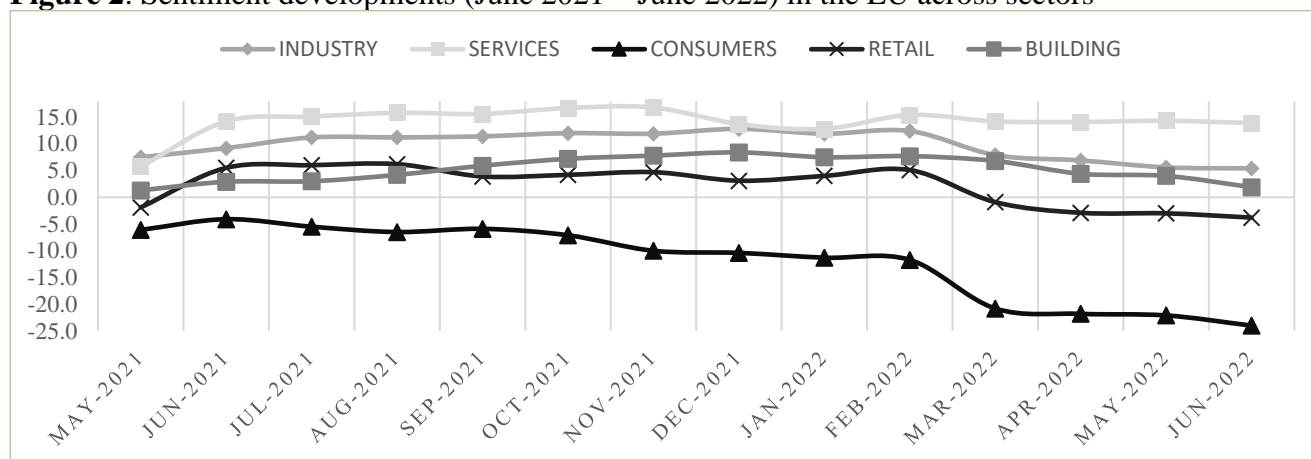
*Note: ESI, EEI and EUI data refer to aggregated EU Member States data*

Source: author's calculation

Even the first glance at the numbers in Table 1 reveals a lot about agents' perceptions of their economic environment. Respondents have lately especially been pessimistic in the US: according to the two most closely watched sentiment measures, consumers' sentiment has been on a steep downward path since last year, and their negative perceptions and expectations have intensified in the last few months of 2022. This is especially true for the University of Michigan ICS, which fell by more than 40% compared to the same period in 2021, reaching the all-time-lowest value in June 2022. Although severe drops have happened before, such a low value of ICS has not been recorded in times of any US recession, including the Great Recession. Moreover, this dramatic month-to-month decline of even eight percentage points surprised even the professionals, as a Bloomberg survey of economists expected ICS to fall slightly since May. Negative trends did not bypass Europe either. Although ESI's year-to-year decrease is not as dramatic, it reveals the decaying overall sentiment. Furthermore, the Employment Expectations Indicator (EEI), which sums up managers' employment plans in surveyed business sectors (European Commission, 2022) indicates the possibility of negative total employment changes in the near future. These annual changes are not necessarily a cause for concern; what is undoubtedly worrisome are the changes that have occurred over the two consecutive months. Just for example, April to May percentage decline was more than three times smaller than the drop from May to June. The third observed European sentiment indicator, Economic Uncertainty Indicator (EUI), measures business managers' and consumers' subjectively perceived difficulty in

making predictions about their future business or financial situation (European Commission, 2022). On top of the observed negative sentiment trends, the feeling of uncertainty is also on the rise, especially compared to last year. The data for the US are taken here mainly as a reference point because of the multiple cases of recessions with an ‘American origin’, later spilling over to the rest of the world. This research primarily aims to observe the European countries in this context, so let us now focus more intensely on European conditions. Even though ESI is a convenient leading indicator containing unique information, it is still an aggregate composite index summing consumers' and managers' perceptions and expectations in different business sectors. The more disaggregated picture might point to certain specifics when it comes to detangling people's rising negative attitudes. Therefore, Figure 2 reveals the monthly development of sentiment in all five sectors that comprise the aggregated ESI.

**Figure 2.** Sentiment developments (June 2021 – June 2022) in the EU across sectors

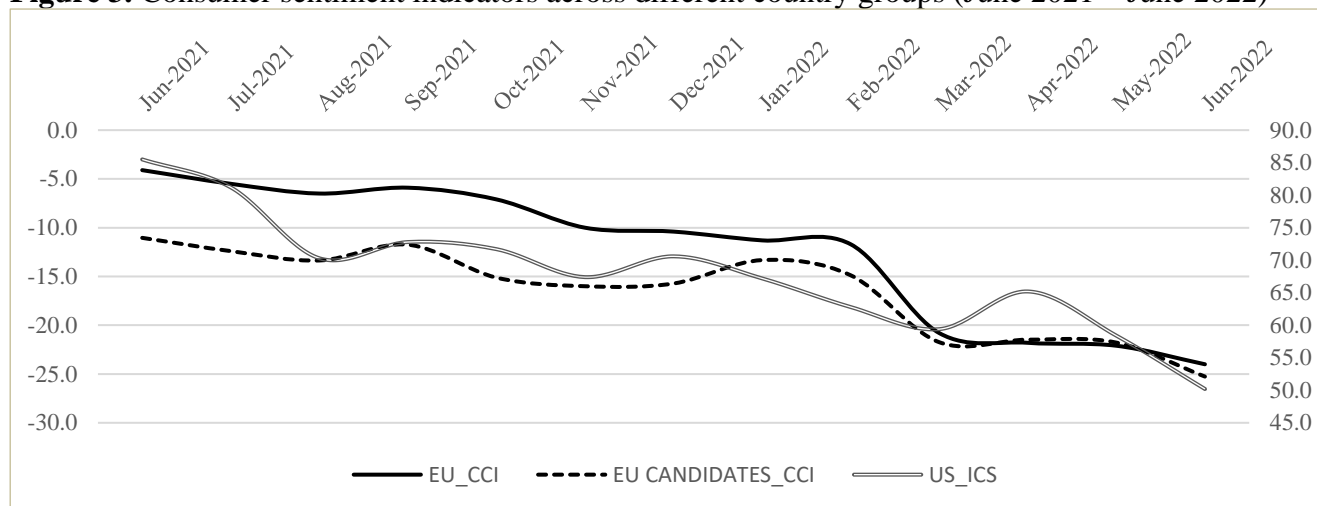


Source: Author

As presented in Figure 2, one might notice that agents' confidence in the four EU business sectors (manufacturing industry, services, retail and construction sector) was mainly constant during the last twelve months, facing a slight downturn since April 2022. On the other hand, the consumer sector noticeably deviates from the other presented sectors with an increasing gap over the previous 12 months. The numbers are alarming. From June 2021 to June 2022, EU consumer confidence (measured by CCI) decreased by as much as 264% and the steepest monthly decline in this period happened in April, when it fell by 78%. CCI's latest published value of -24 points from June 2022 is even lower than all its values during the Great Recession period, including the first strike of the crisis (2008-2009) and the second wave (2012-2013), which manifested in the form of the sovereign debt crisis. According to the presented figures, consumer confidence is severely declining, which is especially dangerous for the upcoming trends of final consumption, the largest GDP component in most economies. Acknowledging that the origin of the potential new large-scale recession might lie in the consumer sector, it would be worthwhile to compare consumer sentiment among the different country groups. Figure 3 demonstrates recent developments of the US ICS, EU CCI, and the average CCI for the EU candidate countries.

*Figure following on the next page*

**Figure 3.** Consumer sentiment indicators across different country groups (June 2021 – June 2022)



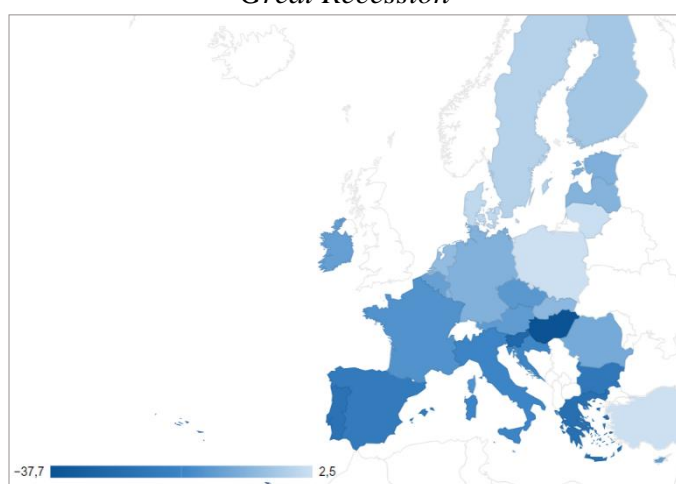
Source: Author

Generally, the presented consumer sentiment indicators' trends in Figure 3 are alike, following a downward path with a more substantial drop in the first half of 2022. When comparing the two European country groups, one might observe their analogue volatility, but the EU candidates experienced lower CCI values throughout almost the entire period. Although it is to expect that less developed countries with a more unstable political scene have an overall lower consumer sensibility, it is nonetheless interesting that the gap between the EU average and EU candidates has almost disappeared in 2022. It seems that the premonition of the soon-to-come economic distress suddenly made consumers from the EU group quite pessimistic. Figure 3 also demonstrates the correspondence between American and European consumer confidence. Looking closely, it is somewhat more challenging to find a matching behaviour pattern of both series, but one thing is particularly worrying at this point. If the commonly used saying 'when the US sneezes, the world catches a cold' is true in this case too, the rest of the (Western) world should be on guard considering the latest American data.

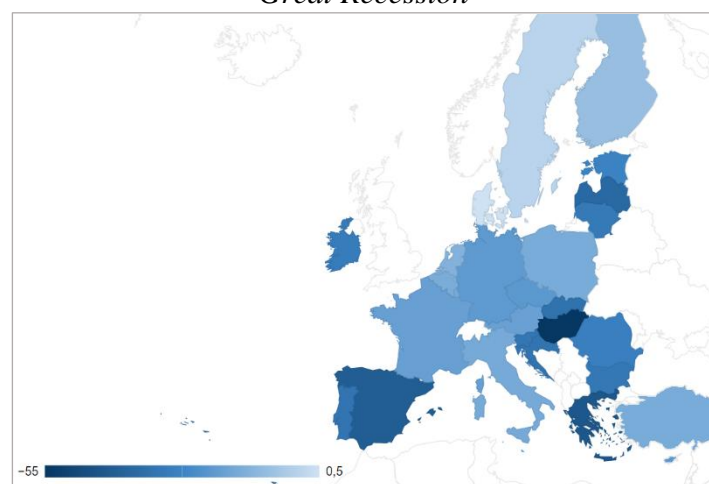
**Figure 4.** CCI in European countries (Member States and Candidate Countries)

a) January 2008 – the beginning of the Great Recession

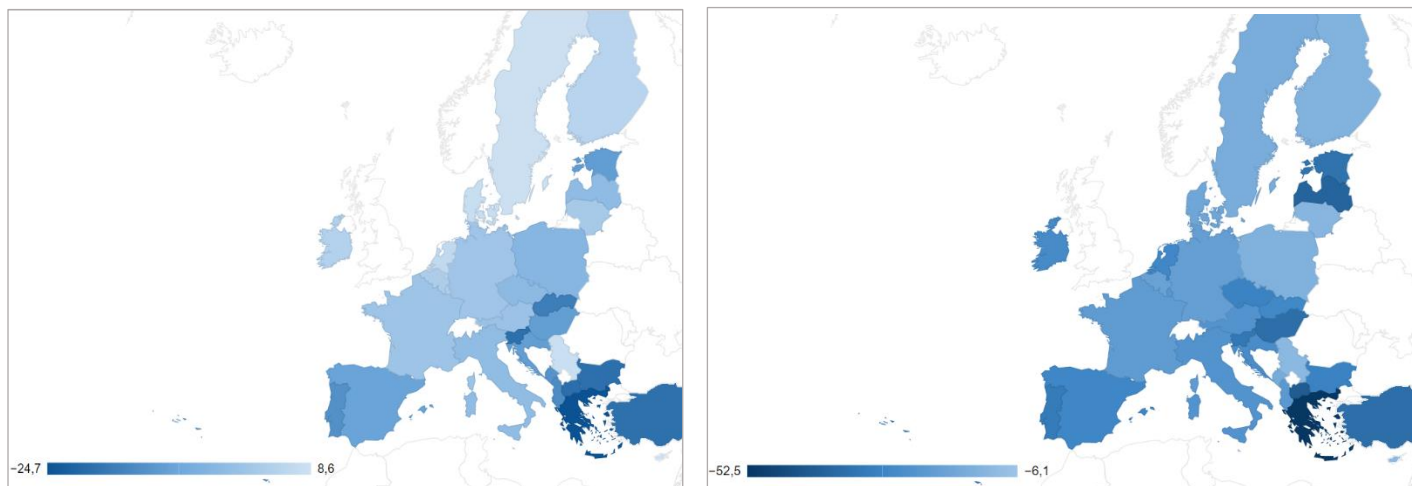
b) February 2009 – the lowest CCI figures during the Great Recession



c) June 2021



d) June 2022



Source: author (adopting the European Commission BCS data)

Lastly, to further assess the particularities of the diminishing European consumer sentiment, Figure 4 offers a country-level overview. The geographical figures present the confidence of European consumers in the four selected points in recent history, where the darker country colour denotes higher pessimism and lighter colour lower pessimism. In this manner, it is possible to compare CCI both across countries (space) and time to provide additional inferences. The four observed periods are: a) January 2008 to visualise CCI in European countries just before the crisis effects spilled over from the US (this period can be seen as the recession prelude and is directly comparable to the present times); b) February 2009 as the period with the highest average EU pessimism in the EU during the entire Great Recession (serves as the ‘most depressed’ figure in the last few decades); c) June 2021 and d) June 2022 are the two recent time points helping to envision the CCI developments in 2022. After the subprime mortgage market collapse in the US in late 2007, which is usually considered the official beginning of the Great Recession, the world soon absorbed the initial crisis effects. However, a whole year had to pass for Europe to experience the economic hardship fully. Figures 4 a)-b) capture that very well. With consumer confidence plunging for a while before 2008, hinting at the imminent turn in the business cycle, the lowest CCI value throughout the recession was recorded a little later, in February 2009. As expected, states that proved to be most vulnerable in economic terms (especially the so-called PIIGS countries) experienced the fastest-growing pessimism. Over time Europe has recovered both in economic and confidence terms, which brings us to the much more bright-shaded situation in Figure 4 c). Unfortunately, the bright shades did not last long, and Figure 4 d) is here to announce the return of the darker times. Several important insights are coming from these four figures. First, the situation in Figure 4 d) is more reminiscent of February 2009, when the previous crisis was in full swing than the situation from the crisis beginning in January 2008. Furthermore, the lowest recorded CCI in June 2022 is in Malta (-6,1 points), meaning that the most confident nation in June 2022 still takes negative CCI values. And lastly, Figures 4 a)-c) demonstrate that over a reasonably long period in the recent past, the lowest sentiment was present in the Mediterranean and other peripheral European countries, while stable and relatively low pessimism remained in central and northern Europe. Figure 4 d) indicates the changing conditions, confirming the inference from Figure 3 – the gap in confidence between the European core and less developed countries is recently closing. It seems that uncertain present times unified Europeans in their collective pessimism and fear of the near future.

#### 4. DISCUSSION AND POLICY IMPLICATIONS

Empirical analysis from the previous chapter clearly outlined one thing. Economic sentiment measures, especially consumer sentiment indices, are all in red, signalling we are potentially about to reach the turn in the business cycle. With severely weakened supply chains, rising geopolitical uncertainty and inflation kicking in, consumers have started to pull back. Nevertheless, what can we further infer from the fact that consumer pessimism now is almost record high and tenaciously



increasing from month to month? Considering what we know about sentiment measures from scholarly literature, it certainly holds that these indicators reflect the current macroeconomic conditions. Hence it is no surprise that they take lower or negative values in times of economic distress as opposed to boom and prosperity. In addition, confidence indicators are also commonly considered to foreshadow macroeconomic trends. According to Matsusaka and Sbordone (1995), almost all recessions were preceded by a decline in confidence, and almost all declines in confidence went ahead of a recession. Knowing how economic agents feel about the economy and how their attitudes change monthly to altering economic conditions might provide plenty of helpful information for economic analysts and policymakers. First of all, confidence indicators improve short-term forecasts. Not only do they help predict the actual levels of their reference macroeconomic series, but reading between the lines could enable economists to get an explanation (cause) of the current state of the economic environment. For example, the European Construction Confidence Indicator (which measures business managers' sentiment in the construction sector) was subject to a massive decline between early 2007 and mid-2009, which was in fact much steeper compared with the consumer sentiment decline. It suggested something was out of the ordinary in the building sector before the crisis erupted. On the other hand, as the recent sentiment data point out, the origin of the new crisis might lie in the consumer sector and this sudden consumer confidence drop should be taken seriously. The rationale behind the economic mechanism at hand is straightforward. Consumers with weakened confidence have diminished willingness to buy and are likely to reduce their overall spending, especially on durable goods such as cars (Hymans, 1970; Mishkin, 1978). They are also likely to lose the initiative to buy a house. Moreover, consumer confidence is closely related to their investment, crediting and saving ambitions. As optimism is reflected in higher consumption and lending, pessimism is associated with greater savings and avoiding crediting in times of uncertainty (Van Raaij and Gianotten, 1990). All of the above has near-future implications for the durable goods markets, real estate markets, stock markets and banking, also indicating that specific policy measures will potentially need to be applied concerning these markets. Therefore, economic analysts could extract essential signals from the recent confidence figures, better predict the upcoming trends in final consumption and even reveal future patterns in economic activity. On the other hand, policymakers could be better prepared to react in an adequate and timely manner. A prompt reaction of governments is crucial in every recession to annul as many adverse effects as possible. Understanding the prevailing consumer sentiment is also important from another aspect. Namely, consumers are the drivers of final consumption and are inherently subject to form opinions and attitudes by what they hear in the media and from the authorities. A good communication strategy is therefore crucial. Government should disclose to the citizens the policies it intends to implement shortly, and assure the public that the authorities are doing their best. Such practices scale down uncertainty among consumers and reduce their discouragement when making financial decisions – which is extremely important at the aggregate level.

## 5. CONCLUSION

The current state of world affairs includes inflation, war and political uncertainty, bearish symptoms in all the major world stock markets and the still present Covid-19 pandemic. At this point, the new global recession seems inevitable. The question is whether it will be as severe as the 2008 recession and rapidly spill over from the US to the rest of the world. Will the recovery be prolonged like 15 years ago and take the U- or even L-letter shape, or will it be transient and (hopefully) imitate the V-letter shape? Nobody, not even the professional economic forecasters and esteemed academics, has the crystal ball to predict the exact parameters of the next recession. Economics is not a discipline in which we can predict and plan anything with certainty. Still, we can sharpen our senses and listen carefully to all the signals the economy sends. On that note, apart from relying solely on standard macroeconomic data (like GDP, unemployment and consumption series), economists should also embrace the benefits of 'soft' variables. These variables, derived from regularly conducted consumer and business surveys, form sentiment indicators and communicate economic agents' momentary perceptions and expectations regarding their economic environment. Moreover, as the commonly



acknowledged leading indicators of economic activity, they carry important information on economic developments much before the standard macroeconomic indicators reveal the same. Thus we have enough reasons to observe confidence indicators very closely. The empirical analysis in this paper showed that sentiment indices in the US and Europe are all in decline (both compared to the previous year and month), indicating that the confidence of economic agents is plunging while their sense of uncertainty heightens. This is especially true for the consumer sector as their lack of confidence has broken records in the past few months. In fact, in June 2022, the European CCI was lower than throughout the entire Great Recession, even in the utmost months. Additionally, looking at how consumer confidence takes value at the European country-level, the situation now resembles a lot of February 2009. Not just that, the discrepancy between the so-far intensely pessimistic peripheral countries and less pessimistic European core almost vanishes. Consumers in Europe and the world, unfortunately, seem to be entirely united in their negative economic perceptions and expectations. These signals should be considered when properly assessing the current conditions and predicting the near-future trends. More accurate forecasts, even several months in advance, can provide policymakers with valuable time to carefully go through possible scenarios and specifically design the policy mix as a response to each scenario. If the essence of the upcoming economic troubles lies in the consumer sector, authorities should accordingly devise strategies to reduce consumers' fear and delaying consumption as much as possible. The Great Recession pointed to examples of countries whose success in overcoming the recession, in addition to well-implemented measures, was also a product of good government communication with the general public. Informing the public about all future government activities in a decisive, comprehensive and transparent manner and regularly reporting progress can reduce uncertainty, panic and inertia among consumers. The main aim of this paper was to contribute to boosting economists' motivation to consider all the aspects of tendency surveys and make use of all their benefits. Further research should, however, employ more advanced econometric and/or machine learning techniques with the help of confidence indicators to reliably predict economic conditions ahead of us.

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