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**STRUCTURAL FUNDS' ECONOMIC IMPACT ON THE
TOURISTIC DEVELOPMENT OF SOUTH-WEST OLTENIA
REGION**

-Summary of the Ph.D. thesis -

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TABLE OF CONTENTS

TABLES.....	6
GRAPHICS.....	10
INTRODUCTION.....	12
PART I. LITERATURE REVIEW	18
CHAP. 1. TOURISM IN THE CONTEX OF DURABLE DEVELOPMENT	18
.....	
1.1. Durable development’s valences in the tourism industry	19
1.2. Tourism in the European Union – evolution, politics, and specific instruments.....	22
1.3. Tourism in Romania	29
<i>1.3.1. Transport infrastructure, important factor for the development of tourism... 29</i>	
<i>1.3.2. Accommodation infrastructure, leisure and the quality of human resources. 31</i>	
<i>1.3.3. Unfavourable factors for Romania’s touristic image..... 33</i>	
<i>1.3.4. Policies and mechanisms regarding tourism..... 36</i>	
<i>1.3.5. Evolution of Romanian tourism..... 39</i>	
1.4. The effects of the COVID-19 pandemic on tourism	42
CHAP.2.COHESSION POLICY – THE INSTITUTIONAL FRAMEWORK	
AT THE EUROPEAN LEVEL	47
2.1. The European cohesion policy’s key moments – institutional evolution and funding instruments.....	48
2.2. Cohesion policy’s conceptual framework and strategic coherence – comparative analysis of the last two programming periods	54
2.3. The institutional strategic framework for the implementation of structural instruments	57
<i>2.3.1. The institutional framework for the implementation of structural instruments 2004 - 2006..... 58</i>	
<i>2.3.2. National strategic reference framework 2007-2013..... 59</i>	
<i>2.3.3. The institutional framework for the 2014 – 2020 programmes..... 61</i>	
2.4. The 2014 – 2020 Cohesion Policy	62
<i>2.4.1. The Cohesion Policy – core element in the implementation of Europa 2020 Strategy..... 62</i>	
<i>2.4.2. Ex-Ante Conditionalities in the Cohesion Policy..... 67</i>	
CHAP.3.FUNDING TOURISM IN ROMANIA THROUGH	
STRUCTURAL INSTRUMENTS.....	73
3.1. The socio-economic relevance of tourism in Romania from the perspective of strategic planification documents.....	74
3.2. The structure, distribution and absorption of grants that support touristic activities in Romania	75
<i>3.2.1. Financial assistance for tourism development pre-adhesion..... 75</i>	
<i>3.2.2. Financial assistance for tourism development post-adhesion</i>	<i>77</i>
<i>3.2.2.1. Tourism investments through the ”Regional Operational Programme” 2007 –2013..... 77</i>	
<i>3.2.2.2 Tourism investments through the ”National Rural Development Programme” 2007 –2013..... 80</i>	
3.3. Distribution and absorption of grants that support turistic activities in the South-West Oltenia Region.....	82
<i>3.3.1. SAPARD – Financial allocation for tourism in the South-West Oltenia</i>	

<i>region</i>	82
3.3.2. <i>Funding tourism in the South-West Oltenia region through the " National Rural Development Programme", 2007 – 2013</i>	83
3.3.3. <i>Funding tourism in the South-West Oltenia region through the " Funding tourism in the South-West Oltenia region through the", 2007 – 2013</i>	86
3.3.4. <i>Summary of funding touristic activities in the South-West Oltenia region through non-reimbursable mechanisms</i>	88
PART II. APPLICATIVE RESEARCH	90
CHAP. 4. TOURISM IN THE SOUTH-WEST OLTENIA REGION	90
4.1. Touristic potential of the South-West Oltenia region: natural, cultural, and historical resources	91
4.2. Accommodation and leisure touristic infrastructure in the South-West Oltenia region	92
4.3. Statistical analysis of the touristic activities in the South-West Oltenia region	96
4.3.1. <i>Analysis of the touristic accommodation capacity in the South-West Oltenia region</i>	<i>96</i>
4.3.2 <i>Analysis of the touristic circulation in the South-West Oltenia region</i>	<i>104</i>
CHAP. 5. ECONOMETRIC MODELING OF THE ECONOMIC IMPACT OF STRUCTURAL FUNDS FINANCING ON TOURISTIC DEVELOPMENT IN THE SOUTH-WEST OLTENIA REGION	107
5.1. Description of the data used for the econometric analysis	108
5.2. Research methodology	115
5.3. Data analysis and interpretation of results	120
5.3.1. <i>Comparative analysis of the evolution of primary economic-financial indicators for the intervention and control groups</i>	<i>120</i>
5.3.2. <i>Counterfactual impact evaluation through econometric</i>	<i>139</i>
5.3.2.1. <i>Econometric analysis through multiple linear regression models in SPSS</i> ... <i>139</i>	
5.3.2.1.1. <i>Econometric modelling of the profits for the PNDR 2007-2013 programme beneficiaries</i>	<i>140</i>
5.3.2.1.2. <i>Econometric modelling of the turnover for the PNDR 2007-2013 programme beneficiaries</i>	<i>144</i>
5.3.2.1.3. <i>Econometric modelling of the profits for the SAPARD programme beneficiaries</i>	<i>146</i>
5.3.2.1.4. <i>Econometric modelling of the turnover for the SAPARD programme beneficiaries</i>	<i>149</i>
5.3.2.1.5. <i>Econometric modelling of the profits for the POR 2007-2013 programme beneficiaries</i>	<i>151</i>
5.3.2.1.6. <i>Econometric modelling of the turnover for the POR 2007-2013 programme beneficiaries</i>	<i>154</i>
5.3.2.2. <i>Econometric analysis through multiple linear regression models in STATA</i>	<i>156</i>
5.3.2.2.1. <i>Econometric analysis at the level of intervention and control groups</i>	<i>156</i>
5.3.2.2.2. <i>Econometric analysis of the PNDR 2007 – 2013 programme</i>	<i>158</i>
5.3.2.2.3. <i>Econometric analysis of the SAPARD programme</i>	<i>159</i>
5.3.2.2.4. <i>Econometric analysis of the POR 2007 – 2013 programme</i>	<i>161</i>
5.3.2.3. <i>Linear regression analysis through panel data with fixed specific effects</i>	<i>162</i>
5.3.2.3.1. <i>Economic impact analysis generated by the touristic infrastructure investments made through the PNDR 2007 – 2013 programme</i>	<i>162</i>
5.3.2.3.2. <i>Economic impact analysis generated by the touristic infrastructure</i>	

investments made through the SAPARD programme	164
5.3.2.3.3. Economic impact analysis generated by the touristic infrastructure investments made through the POR 2007 – 2013 programme	165
5.4. The research’s qualitative summative observations.....	166
5.5. Limits and difficulties occurred during the research.....	168
CONCLUSIONS, RECOMMENDATIONS AND FUTURE DEVELOPMENTS	169
BIBLIOGRAPHY	183
CURRICULUM VITAE.....	196
LIST OF WORKS.....	208

SUMMARY

Tourism has represented, and will continue to represent, a major opportunity for economic growth at the regional, national, and global level, especially in the context of greater challenges faced by sustainable development initiatives. The Ph.D. thesis summarily presents the touristic sector, through its role as a developmental pillar, alongside the main support mechanisms, at the European and national strata, in addition to the challenges posed by the COVID-19 pandemic in this area.

The European Union has developed, through its common approaches (the cohesion policy), numerous financial instruments and mechanisms that support touristic and leisure infrastructure investments, as a method to achieve its strategic goal of keeping Europe on the first place as a global touristic destination. As such, the Ph.D. thesis addresses, throughout the theoretical sections, the cohesion policy's key moments of development and evolution, while also presenting its strategic objectives and the opportunities to sustain the sector in general, to which the structure and distribution of non-reimbursable grants that enable touristic infrastructure investments are added. Although, since March 2020, the tourism industry has been greatly affected by the COVID-19 pandemic, the research objectives of this Ph.D. thesis are not focused on addressing the major challenges or economic effects entailed by this crisis.

Furthermore, according to the opportunity studies and the sustainable development potential of the touristic sector, Romania has benefited, through community programmes, of a consistent amount of grants and non-reimbursable funds. The impact analysis of these major investments is oriented towards a suite of quantitative data, such as the number of private entities supported (beneficiaries), new accommodation spaces created, total investments allocated etc. Also, the thesis includes a complex and in-depth economic impact analysis of touristic structural funds investments upon the overall regional development, using as a case study the South-West Oltenia region.

In order to demonstrate the existence of an economic impact upon the touristic development of the region, a counter-factual analysis was utilized, between an intervention group, comprised of 143 societies, beneficiary of non-reimbursable funds, and a control group, which consisted of 101 private entities with predominantly touristic activities, across an interval of maximum 13 years. Thus, the research contains a comparative statistical analysis of the primary economic performance indicators, completed by two econometric analysis models – multiple linear regression models and linear regression analysis of panel data with fixed specific effects.

The relevance and originality of the research topic

The research topic, addressed across the thesis, is represented by an economic impact evaluation of structural financial instruments, dedicated to tourism and leisure infrastructure development, for the South-West Oltenia region.

Although the European Community policies and financial instruments represent a topic which has a history of over six decades, its frequent evolution and changes, introduced through collective reforms and strategies, transform the subject into a *thematic that is actual* and of increased interest for the academic, public, and political spectrum.

Romania's experience in implementing measures to contribute to the achievement of Community strategic objectives is relatively recent, associated with the 2007-2013 programming period and the current one, 2014-2020.

The impact analysis of non-reimbursable structural funds upon economic growth, its strategic coherence over time, alongside particularized experiences for EU's member states regarding the implementation of Community instruments, mechanisms, and regulations, have been and still are extensively studied, at the level of old member states (EU-15), numerous studies, analyzes and evaluation reports being addressed by the specific literature or governmental level. Not the same thing can be said about the research projects related to the impact of structural funds in Romania, such documents being, by comparison, quite rare. The final report, for the 2007-2013 programmes, has been finished in mid-2016, and most of the official implementation documents, coming from the management authorities, are still in an intermediary phase (e.g., the annual progress report regarding the 2014 PNDR implementation in Romania – the reported and interpreted datasets stop at 31st of December 2014).

If at the European level there are numerous scientific studies and evaluation reports on the impact of structural funds upon tourism are being elaborated (even the EC does this in its social, economic and territorial cohesion reports, or in the cohesion policy's ex-post evaluation report – package 9, Culture and Tourism) at the level of South-West Oltenia Development Region, until the completion of this thesis, there were no documents available, which would specifically address this topic or even in the sense of broader regional development (in the pre-adhesion period and during the 2007-2013 programming one).

On another order of ideas, the thesis' originality also resides in the research methods used, amongst which we have: hypothesis, quantitative research, comparative analysis and econometric modelling.

Through all the above-mentioned we can understand how the subject selected and studied across the Ph.D. thesis represents an actual and relevant topic of research.

Objectives, hypotheses, and research stages

The thesis' primary objective is represented by a complex and in-depth economic impact analysis (ex-post) of touristic structural investments (for the 2007-2013 period) upon regional development, utilizing the South-West Oltenia region as a study case.

Throughout the thesis' content development phase, *a suite of research and analysis hypotheses* have been formulated and demonstrated, amongst them being:

1. Although the theoretical paradigm, from which European regional policies emerged, has been focusing on the redistribution, equilibrium, and socio-economic developmental disparities reduction mechanisms, as to ensure economic cohesion and convergence, this approach was modified in time towards one aimed at performant and efficient development, driven by innovation and competitiveness;

2. The positive and increased evolution of touristic activities in the South-West Oltenia region is primarily based on the qualitative and quantitative development of touristic infrastructure;

3. This qualitative and quantitative development, for the last 13 years, has been largely due to physical investments made through the non-reimbursable schemes that have been allocated to Romania, from its position, since 2007, as an EU member state;

4. At the level of South-West Oltenia region the funding opportunities, through European structural resources, have represented, for the vast majority of tourism entrepreneurs, the sole financial solutions necessary for both infrastructure development and capitalization of the regional natural, historical and cultural potential;

5. The structural funds used for tourism and leisure investments have generated, overall, a positive economic impact upon the South-West Oltenia region;

6. The economic impact generated by these investments in the South-West Oltenia region is moderate and differs, both at the level of beneficiary counties but also across funding programmes.

The steps necessary to conduct the research entailed four phases, as follows:

I. The structuring phase

In this phase I sought to identify the necessary information, needed to properly establish the primary research objective, and subsequently structure its correlated hypotheses. In this regard, I have realized a specialty literature review, alongside the analysis of evaluation reports (impact, ex-post, final implementation ones etc.) for the operational programmes that have sustained or continue to sustain touristic infrastructure investments in the South-West Oltenia region. The specialty literature has proven to be a solid base for the establishment of research hypotheses and the identification of the available microdata selection and analysis methods or techniques.

II. The observation phase

After the completion of the initial phase, in which the above-mentioned two research hypotheses have been structured and established, I have undertaken an ample observation of the available relevant sources and information pieces, needed in the evaluation process. At the end of this phase, I have identified the following data sources:

- the selection reports of private beneficiaries for non-reimbursable funds allocated towards rural touristic infrastructure development (SAPARD - Special Accession Programme for Agriculture and Rural Development, National Programme for Rural Development - PNDR 2007-2013);
- the final Regional Operational Programme - POR 2007-2013 beneficiaries lists for the construction, development and modernization of urban touristic infrastructure – Major Area of Intervention - DMI 5.2;
- the annual datasets consisting of the economic-financial performance indicators for private entities, available on the Finance Ministry's website (<http://www.mfinante.gov.ro/>) and on other specialized online sources, such as <https://www.listaфирme.ro/> or <https://termene.ro/фирme>; the up-to-date lists of touristic hosting structures, classified by MEET (Ministry of Economy, Entrepreneurship and Tourism) - <http://turism.gov.ro/web/autorizare-turism/>; official communication with AFIR (Agency for Financing Rural Investments) to procure up-to-date reports and final beneficiaries lists for non-reimbursable rural area fundings, in the South-West Oltenia region.

III. Analysis phase

The analysis phase has included a contextual analysis, a quantitative one, alongside a series of qualitative observations.

The context analysis implied a microdata collection from official sources, formerly identified in the observation phase, and the processing, synthesis, and selection of the former through various triangulation techniques, meant to increase the conclusions' credibility and coherence, for those generated by observed impact and effects.

The quantitative analysis included a statistical interpretation of the economic-financial performance indicators' evolution in time for the analysed firms, completed by two econometric analysis models - multiple linear regression and linear analysis of panel data with fixed specific effects.

The statistical analysis encompassed the calculation and observation of three economic-financial indicators' evolution/dynamic in time (average turnover rates, average revenue and average number of employees) through the application of counter-factual comparison methods for the net structural intervention's effects (both the overall intervention – cumulated across all three types of funding, but also for each individual programme).

The multi-factorial econometric analysis integrated two methods:

- running a *multiple linear regression*, realized through two statistical analysis software (SPSS and STATA);
- running an *linear regression analysis model with panel data with fixed specific effects*.

The thesis' structure

The Ph.D. thesis is organised in two main parts, which add up to five chapters.

Part I, Literature review, includes three chapters.

The first chapter, entitled "*Tourism in the context of sustainable development*", summarizes the strategic importance of tourism across all levels, its global evolution and growth (including in 2019) and its importance, allocated at an European level, in regards to maintaining the continent's top position in terms of international travellers' preferences. This chapter also addresses the touristic sector in Romania, analysing the main factors that contribute to the development of competitive and qualitative touristic services, such as: transport infrastructure, leisure and accommodation infrastructure, human resources, national complementary and support policies.

Taking into consideration the actual crisis, generated by the COVID-19 pandemic, and its devastating impact on global tourism, this chapter encompasses a summary of the core effects generated by the medical situation and the main measure undertaken at the national level to counteract the negative downsides it posed for tourism.

The second chapter, entitled "*Cohesion Policy – the institutional framework at the European level*" includes the key milestones of the European cohesion policy historic evolution, analysing the contexts that have characterized and sustained such changes. Furthermore, I have investigated the cohesion policy's strategic coherence in time, demonstrating, through the prism of national and European documents, the core strategic vision's consistency, which regarded the member states' economic development, while the strategic objectives have shifted from ensuring development through cohesion and convergence towards efficiency and performance. In this chapter I have also described the institutional strategic framework for the implementation of structural instruments, which has underlined the primary institutional evolutions of the regional development policy in Romania. Moreover, the second chapter has integrated an overview of the main aspects followed through the reformed 2014-2020 cohesion policy and the intervention mechanism introduced in parallel with this programming and implementation period: the ex-ante conditionalities.

The third chapter, entitled "*Funding tourism in Romania through structural instruments*" summarised the funding programmes that include dedicated measures for tourism infrastructure investments and how they are allocated at a national level, alongside an illustration of the sums attracted/number of projects financed in the South-West Oltenia region, structured both from a numeric and value-based point of view but also based on their distribution at the counties' level.

Part II., Applicative research, consists of two chapters, focused on the comparative statistical and econometric analysis, overlapped with the main research objective.

Thus, *the fourth chapter*, entitled "*Tourism in the South-West Oltenia Region*", consists of a research, based on INS' aggregated datasets, which followed the evolution, for the last 13 years, of the main touristic indicators which represent the accommodation capacity and touristic circulation in South-West Oltenia region. Across this chapter, I have also demonstrated the existence of a direct linkage between positive evolutions, accentuated by the touristic indicators' growth, and the number of investment projects, financed through non-reimbursable structural funds, dedicated to this sector.

The fifth chapter, entitled "*Econometric modelling and the economic impact of structural funds on tourism development in the South-West Oltenia region*", had as a main objective the impact analysis of interventions made through structural funds, which have financed touristic infrastructure projects in the South-West Oltenia region, respectively the evaluation of their economic impact upon the area. The analysed timeframe was 13 years (2007-2019 period), and the research methodology included a quantitative, counter-factual, analysis applied across an *intervention group*, which represented 143 final beneficiaries, in the form of firms that have accessed non-reimbursable structural funds for touristic infrastructure, and 101 private entities, active in the touristic field, which were selected through various triangulation methods, as to form

a *control group*. The impact analysis was applied both at the South-West Oltenia region's level and at the level of each of its constituent counties, respectively Dolj, Gorj, Mehedinți, Olt and Vâlcea.

This chapter included a description of the data utilized in the analysis, the process of collection and selection, the research methodology applied, completed through the analysis and interpretation of information through:

- a statistical analysis of the primary financial performance indicators for the analysed firms in the touristic sector;
- a counter-factual evaluation, through econometric models.

The latter, consists of three different methods, respectively the econometric analysis through multiple linear regression models, implemented in the statistic software SPSS, the econometric analysis through multiple linear regression models, implemented in STATA, and the linear regression analysis of panel data with fixed specific effects. As such, this chapter also presented the limits and difficulties faced when conducting the research.

The Ph.D. thesis ends with the final conclusions and recommendations.

Applications. Personal contributions

The applicative research developed across the Ph.D. thesis represents my personal contribution, both in regards to the data collection and selection process, but especially in relation to the development of unique econometric models, through which I was able to demonstrate the research hypotheses and the primary objective.

In order to oversee the economic impact of tourism structural investments for the South-West Oltenia region, I chose to utilize a counter-factual method of comparative evaluation, which was applied to an *intervention group* (structural funds beneficiaries) and a *control group*, both encompassing 244 societies which operate in the tourism industry across the South-West Oltenia region.

The intervention group (structural non-reimbursable funds beneficiaries) was formed by 143 active private enterprises, from the South-West Oltenia region, which were direct beneficiaries of tourism and leisure infrastructure projects (entities with accommodation and leisure infrastructure), invested through the non-reimbursable funds allocated to Romania in its candidate state quality (SAPARD) and later on member of the European Union (PNDR and POR 2007-2013).

From the list of direct beneficiaries for structural funds, I have omitted from the analysis:

- public beneficiaries (public local authorities);
- private beneficiaries founded based on the OUG 44/2008 ((authorized physical persons) (AFP), individual enterprises (II), or familial enterprises (IF));
- private beneficiaries whose entities have been deregistered or declared inactive during the research interval.

In order to properly identify the final beneficiaries of structural funds for tourism infrastructure (*intervention group*), I applied the data triangulation technique, verifying the data accuracy through a multi-source comparison:

- followed on the Finance Ministry's website the entity's status (active, inactive, deregistered), eliminating from the list of final beneficiaries the firms that had their activity suspended, were inactive or deregistered;
- followed in the economic indicators' list from the annual financial statements, collected by the "National Fiscal Administration Agency", both the turnover rate but also the value of immobilized actives, where the value of the non-reimbursable subventions that are received, after the implementation of funding contracts, is registered. From the list of selected beneficiaries in the second phase the companies that haven't registered immobilized actives (or whose values were extremely low) have been eliminated, since such a financial-accounting reported situation

certifies that the initially selected firm did not implement or finish the investment project;

- I compared the selected active beneficiaries with the list of accommodation structures classified by the Ministry of Economy, Entrepreneurship and Tourism (MEAT), list which is digitally available through the institutions' website and is constantly updated. As such, I kept in the database of final beneficiaries those entities that have received accreditation for the accommodation structures financed with structural funds;

- I have eliminated from the research's database the public beneficiaries and physical authorized persons. This was done primarily because there is a limited amount of financial data for these beneficiaries;

- in order to better capture the impact of touristic investments, I have eliminated from the final database of beneficiaries those companies whose primary economic activities differed from accommodation and leisure. Thus, I identified a suite of large-scale companies, with high turnover and employment rates, whose primary revenue or work streams were not associated with touristic investment. To avoid altering the research end-results, these entities have been eliminated from the database used in the analysis.

The control group consisted of 101 active societies in the touristic domain, who have registered their headquarters or opened working points in the South-West Oltenia region, entities that realized self-funded investments in the tourism infrastructure during the research period (2007-2019).

For a more precise counter-factual evaluation, I have applied during the selection process of the control group a suite of criteria, meant to ensure a high degree of similitude, comparability, and robustness between both groups. As such I sought:

- the selection of a similar or proportional number of private entities from each county in balance with those that were beneficiaries of structural funds in their respective county;

- the selection of private entities that made investments in touristic infrastructure which were certified by the Tourism Ministry (nowadays MEAT through the classification certificates);

- the selection of firms that operated in the same localities with beneficiaries of non-reimbursable funds (in the instances where I could not identify other entities with accredited touristic infrastructure, I searched to identify and select companies that were in the geographic proximity of localities which had touristic infrastructures financed through structural funds);

- the selection of entities that offered similar hosting conditions, from the point of view of comfort (number of stars), categories (hotels, hostels, guesthouses, resorts etc.), and number of rooms available. The vast majority of accommodation units, financed through structural funds, are either hostels or agro-guesthouses of 3-4 stars and have a total of 10 rooms available at the location;

- because the majority of structural investments have been directed at beneficiaries coming from rural areas, in the process of selecting the control group's firms I sought to identify, as much as possible, other rural entities;

- I included in the control group beneficiaries which operated for at least 6 years, in order to have a broader analysis interval;

- I have excluded from the control group entities that have other primary economic activities (the profits registered from tourism being neglectable when compared to those generated by the main activity).

The research interval, respectively the analysed period, is 13 years and encompasses the 2007-2019 period, in the study case being included firms which operate in the touristic or leisure domain and that were founded based on the Law 31/1990 „regarding commercial societies”.

The analysis phase included a context analysis, a quantitative one and suite of qualitative observations.

The context analysis entailed a microdata collection from official sources, identified during the observation phase, the processing, synthesis, and selection of the former being done through various triangulation techniques, as to increase the conclusions' credibility and coherence.

The quantitative analysis included a statistical interpretation of the economic-financial performance indicators' evolution in time for the analysed firms, completed by two econometric analysis models - multiple linear regression and linear analysis of panel data with fixed specific effects.

The statistical analysis encompassed the calculation and observation of three economic-financial indicators' evolution/dynamic in time (average turnover rates, average revenue and average number of employees) through the application of counter-factual comparison methods for the net structural intervention's effects (both the overall intervention – cumulated across all three types of funding, but also for each individual programme).

The multifactorial econometric analysis included two methods:

- firstly, I tested the research's hypotheses by running some ***multiple linear regression equations*** which have analysed the collected microdata for the independent variable at the initial intervention moment (the t_0 moment established for each funding programme) and the variables' values at the end of the research interval. The multiple linear regression analysis was conducted through the usage of two statistical data interpretation software (SPSS and STATA) while I utilized different regression equations. In order to showcase the existence of positive correlations between independent and dependent variables I have developed and tested numerous regression equations, modifying the dependent variable (turnover rate or revenue), eliminating some of the independent variables, while for the statistical analysis carried out in STATA I have separately run the data coming from beneficiary firms (intervention group) and the data extrapolated from the control group, in order to comparatively follow the correlation of variables.

- secondly, in order to complete the econometric models of multiple linear regression, I have utilized the ***linear analysis model of panel data with fixed specific effects***. The estimation of econometric models' equations (determining of the parameters' estimators) was realized based on the values registered for the 7 economic-financial indicators at the level of both analysis groups (intervention and control) across their respective timeframes and for each funding programme.

As I was stating, the touristic development and the revenue growth registered by this industry are conditioned by the physical infrastructure, quality and diversity of services, diversity and beauty of cultural-touristic sights, and the efficient marketing of these aspects. Any touristic entity needs to promote its services and increase its visibility amongst potential clients.

In order to interpret to what extent the entities selected to compose the analysed dataset (both the control and intervention groups) possess an on-line visibility, I have researched their digital footprint and realized a comparison with touristic places that already have implemented such mechanisms (e.g., personalised websites, Facebook/ Instagram pages, booking platform etc.). In order to easily identify these entities I searched the digital information associated with these companies both their official names and the commercial ones. The commercial names have been identified from the reports made by the indexed touristic entities, realized and published monthly by MEAT.

The firms which were beneficiaries of non-reimbursable funds register a high on-line visibility rate, as approximatively 72% of these touristic entities (102 out 143 of the companies that have accessed such financing schemes) have developed either individual webpages, Facebook pages or both measures, to promote their activities on-line.

These results showcase part of the positive impact generated by touristic investments made through non-reimbursable funds, actively contributing to the development of Romania's touristic image, both internally and abroad.

In order to facilitate the impact analysis and research regarding structural funds and to generate coherent and credible results, it is important that the intermediary and management authorities, responsible for the monitorization and gestion of the financing programmes, to

frequently update and enable public access to the lists of final beneficiaries, terminated contracts, alongside the sums utilized by each firm for every single investment project they have accessed. Furthermore, at the monitorization level, for the project's sustainability period (after the investment projects are finished), there should be introduced and monitored for at least 2 year a suite of economic-financial performance indicators, which should be reported by the beneficiaries of structural funds: number of employees, revenue streams from the financed activity, turnover from the financed activity. Because through the simple metering of completed investments and expenditure levels it is impossible to generate an economic impact analysis, but rather a superficial evaluation of the operational programmes' efficiency in achieving some quantitative indicators. Taking into account past experiences and the high workload of the management authorities' employees, in order to solved deficiencies in the monitoring, collection, and even data analysis phases, the economic impact and performance metering of financing programmes can be externalized to specialized research and analysis companies.

Conclusions

The quantitative data clearly indicate a direct impact in regards to the development of touristic infrastructure, due to the simple increase in the number of structures related to accommodation, leisure and touristic information. Beyond the quantitative indicator, the non-reimbursable funds' effects can be identified across the qualitative indicators regarding the diversity and quality of the emerging infrastructures. Being relatively new investments (maximum 13 years since they were created), the infrastructure's quality is firstly ensured by the „age” of these developments. Secondly, the majority of investments, financed through non-reimbursable funds, have established minimal quality requirements, as a prerequisite for the project' selection. For instance, in order to finance construction, renovation or modernization investments for rural hostel or agro-guesthouses the project requires them to maintain a comfort level of minimum 3 stars/daisies.

In the South-West Oltenia region, the positive evolution registered by touristic activities is sustained by infrastructure development (quantitative and qualitative) and the increase of touristic activities (number of tourists, number of nights stayed).

Based on the official statistical data, throughout the last 13 years, the touristic infrastructure in the South-West Oltenia region has recorded a spectacular quantitative development, characterized by the increase of touristic accommodation structures (with a capacity above 5 rooms), the latter being 2.45 times higher than in 2007. At the level of every county the evolution is also astonishing, with varied increase rates ranging from: 238% increase in Dolj, 440% Gorj, 433% Olt, 505% Mehedinți and 164% in Vâlcea.

Comparatively overlapping the evolution of touristic structures, both at the regional and counties levels, and the number of touristic projects financed through structural funds, showcases a direct correlation between these two factors. Furthermore, the high number of touristic structures is directly linked with the type of investments realized through non-reimbursable funds. Thus, the financing of the vast majority of accommodation infrastructure projects is directly and clearly reflected in the positive evolution, based on these types of structures, registered across the counties. The illustrated and comparatively analysed results demonstrate that the qualitative and quantitative development of touristic infrastructure in the South-West Oltenia region was determined by the investments enabled through the pre-adhesion non-reimbursable funds and the structural ones.

As such, at the level of South-West Oltenia region, the financing opportunities offered by European structural funds have represented, for a vast majority of tourism entrepreneurs, the sole financial options available for infrastructure development and capitalization of the region's natural, historical, and cultural potential.

The clear conclusion, extrapolated from the indicator regarding the *average turnover rate*, was that non-reimbursable or structural funds, allocated for touristic investments in the South-West Oltenia region have generate a net positive impact upon the regional development, which economically translates into a positive evolution (increased values) of this margin for the beneficiary firms when compared to the control group.

Even though the second indicator's evolution, *average profit*, has not registered increased values for the intervention group, throughout the analysed period, the fact that the final result was a positive one, superior to the t_0 moment and, that for the latest analysed period the average revenue of the structural funds' beneficiaries registered similar growth to the one generated by the control group, it can be stated that, even in this situation, the economic impact of touristic development in the South-West Oltenia region was a positive one. Moreover, through this indicator, Hypothesis 1 was verified and confirmed, for two of the three financing programmes: SAPARD and POR 2007-2013.

The analysis of the evolution of average employment rates, regarding the intervention group, control one or the total levels registered in the South-West Oltenia region, allows a preliminary conclusion to be expressed: none of the financing programmes has contributed to the growth of the average number of employees. The fact that the average workplaces have remained constant at this level, relatively increasing, but above the average of the control group, supports the Hypothesis 1 of the thesis, and once again validates the positive impact generated by structural investments in terms of economic development for the South-West Oltenia region, since as they ensured a relatively stable workforce occupancy in the local economies, which supports social insurance networks and the state budgeted through the taxes paid by the employees working in the touristic sector.

After the dynamic and comparative analysis of the 3 economic-financial indicators for the ***beneficiaries of the PNDR 2007-2013 beneficiaries and control group***, the conclusion was that non-reimbursable funds, allocated through this programme, have clearly contributed to the touristic and economic development of the region (capital infusion, investments, income streams or workplaces created), but they were not directly proportional to the volume of non-reimbursable sums attracted. Across the South-West Oltenia region, the average turnover rate for the intervention group has registered a net positive value and an accentuated growth, throughout the analysed timeframe, while the economic performance of the beneficiary entities has been superior to the ones recorded in the control group. In regards to the average profits, calculated for both groups and across the South-West region, the performance registered by the intervention one was lower than that recorded by the control group, although net superior to the t_0 moment, which demonstrates that touristic infrastructure investments financed through the PNDR 2007-2013 programme have simultaneously contributed to the development of average profit rates for the beneficiary firms, subsequently expanding the tourism industry across the area.

The results of the analysis of the 3 economic-financial indicators for the beneficiaries of the SAPARD program highlighted, first of all, a positive evolution at the level of the South-West Oltenia Region for each of the 3 economic-financial indicators calculated, both in relation to the control group and In relation to time t_0 , a firm conclusion that could be drawn about the impact of non-reimbursable funds attracted by the SAPARD program on tourism development in the Southwest Oltenia Region was that of a real, visible and clearly positive impact on the region's economy.

A direct connection between the number and the value of the attracted structural funds was manifested, to a certain extent, in the analysis of the economic impact generated by the POR 2007 - 2103. Compared to the average turnover, whose evolution was much less oscillating, as in in the case of the other 2 financing programs, the evolution of the average profit at the level of the 4 counties was very varied, oscillating and registered very different values both in relation to the chosen moment t_0 and in comparison with the control group.

The positive evolution of all 3 indicators confirms the existence of a positive economic impact in the South-West Oltenia region for each and everyone of the financing programmes. Apart of the superior economic performance registered by the intervention groups, in relation to the to moment and the control group (especially average turnover and employment rates), the impact analysis must also weigh-in the *scenario in which these funds have not been granted*.

Thus, at the level of non-reimbursable funds, especially the first and second intervention groups, the lack of these financial opportunities would have drastically reduced the number of touristic investments. In the absence of these new societies (the vast majority being founded together with the grants) across the touristic economy of South-West Oltenia, the cumulative income generated in the economy (salaries, profits, taxes, contributions, connex revenue streams etc.) would have been drastically reduces. In concrete terms, the total turnover rate for 207, generated by the intervention group's entities (cumulated for all three of the financing programmes) was around 78 mil. Lei, while in 2018 this indicator has increased the total value 186 mil. Lei. The profit generated by the same group of firms in 2007 added up to 6.4 mil Lei and increased to 21.7 mil. Lei in 2018. Another indicator which registered a significant increase was the one related to immobilized actives, which have recorded a growth from 99.5 mil Lei in 2007 all the way to 378 mil. Lei in 2018. This value showcased the a significant increase of the touristic infrastructure across the South-West Oltenia region, evolution primarily sustained through the allocation of non-reimbursable funds. If the number of employees has not registered any significant increase, the creation and maintenance, in the touristic economy, of the intervention group's firms has created 1.300 new workplaces (declared) across the region.

Considering the results generated by the analysis, alongside the above-presented observations, the conclusion that was firmly made is that structural funds had a positive economic impact in the South-West Oltenia region, even though its intensity has varied, in terms of temporal lines, beneficiary counties or financing programmes.

In addition to the statistical analysis of the dynamic evolution of all three economic-financial indicators, the primary conclusions, resulted from ***all the econometric analysis models***, are:

The econometric modelling for the PNDR 2007-2013 programme, using multiple linear regression analysis through the SPSS software, was relevant to the proposed equation and confirmed the existence of a positive correlation, albeit weak, *between non-reimbursable financing (independent variable) and profits (dependent variable)*. This moderate influence (caused by an inconsistent and extremely fluctuant evolution of the average profits) was also observed in the statistical analysis of the indicator's dynamic evolution. Even though, overall, the influence of non-reimbursable financing upon profit margins was relatively modest, the forms is positive and forms a complementarity relation with the other positive aspects generated across the touristic economy of the South-West Oltenia region.

The lack of a significant linkage between both the independent and dependent variables does not mean that the funds accessed through the PNDR 2007-2013 programme have not generated a positive impact upon the development of tourism in the region, but rather that we cannot associate the profits' evolution of an entity with the usage of non-reimbursable funds.

The influence of non-reimbursable funds, attracted by the beneficiaries of the PNDR 2007-2013 programme, upon their profit and turnover rates is positive, but insignificant and even random. Thus, the economic impact, of these financing schemes for touristic development, is otherwise manifested through the number of active private entities which generate workplaces and revenue fluxes across the regional economy, while offering a diverse and qualitative range of services to tourists.

The econometric modelling for the SAPARD beneficiaries showed that the evolution of profit margins is positively influenced by the non-reimbursable funds, although the intensity of the profit modulations is relatively modest, or even insignificant. In this regard, the economic performance of an entity cannot be directly associated with the value of a non-reimbursable grant, and the measurement of the entity's performance in correlation with non-reimbursable funds is

outside the boundaries of this research. Furthermore, the positive impact of non-reimbursable funds, accessed through the SAPARD programme, is manifested in the touristic industry of the South-West Oltenia region through the quality, quantity and diversity of touristic infrastructure, the growth of revenue streams and employment. Also, when analysing the SAPARD beneficiaries, the model indicates an increased positive influence of the non-reimbursable grants upon the turnover rates rather than profit margins.

*The final conclusion, which can be drawn from the analysis of both dependent variables in relation to the non-reimbursable financing scheme is that, for the **beneficiaries of the POR 2007-2013 programme**, the non-reimbursable funds have a real positive influence, directly proportional and significant from a statistical point of view, both upon the profits and turnovers recorded.*

*In terms of a general conclusion, which can be extrapolated from the econometric analysis applied separately for each financing programme, the results showcase a positive correlation, albeit different in terms of intensity, of the independent variable *Fin_Neramb* upon the dependent one *CA*. Thus, the research does not seek to underline the percentage/degree of impact generated but simply to demonstrate the presence of a positive impact of non-reimbursable funds upon the development of tourism in the South-West Oltenia region.*

The conclusions drawn from the STATA econometric modelling confirm both research hypotheses while also showcasing and confirming similar evolutions and trends for all three financing programmes – indifferent of the statistical analysis model used or the methodology of selection for the units (entities) included in the datasets.

Thus, there is a positive influence upon the economy of the South-West region, moderate in intensity and different at the level of the 3 financing programmes.

The results generated by the panel analysis with fixed economic effects for the POR 2007-2013 programme indicates an insignificant influence, from a statistical point of view, although positive and moderate, in terms of intensity, for the independent variable non-reimbursable financing and its influence upon profits.

The final conclusions that can be drawn after the analysis of panel data through the model of regression with fixed effects is the existence of an influence or direct positive correlation, although extremely moderate, between the non-reimbursable financing and all the other economic efficiency indicators, which confirms a positive economic effect generated by these types of programmes at the level of touristic economy in the South-West Oltenia region.

Even though the economic impact generated reflects a moderate intensity, this aspect must not mislead us into believing that the influence of these financial instruments is insignificant for the economy. The moderate results of the indicators can be explained through a variety of factors, whose influence is not found in the analysis, but which can considerably modify their values.

The research's limits

From the aspects, which influence the impact analysis and can alter the research results, it is worth mentioning that there is no separate accounting for the economic-financial performance indicators of the firms (turnover, profit, number of employees), generated exclusively by the activities specific to the tourism industry (accommodation activities 5520, restaurants and bars 5610 or entertainment and free-time activities 9329). The financial datasets, found on the Finance Ministry's website, to which I had access, do not offer a separated metering of these indicators for each individual activity, the profit and turnover balance sheets being registered for the primary accredited activity.

Another problematic aspect was the lack of an up-to-date and publicly accessible report regarding the final beneficiaries of the financing programmes.

Notwithstanding, that a major influence, of the economic-financial indicators for the tourism industry, consists in the revenues generated by the touristic entities registered as:

”Authorized Physical Person” (PFA), ”Individual Enterprise” (II), ”Familial Enterprise” (IF), ”Non-profit Organization” (NGO), etc.; incomes which cannot be included in this analysis.

Least but not lastly, we must also consider the scale and effects posed by illicit employment or unreported revenues, for the development of the touristic sector in the South-West Oltenia region. Aspect especially true as firms in rural areas tend to register an extremely low number of employees (a lot of the human resources involved into the management of the touristic infrastructure coming from the family which own the firm), but also noticing that the levels of incomes generated by the touristic activity tends to be, in reality, a lot larger than the indicators reported in the official financial balance sheets.

Future developments

The future development, of this research, consists in a new qualitative analysis regarding the impact generated by non-reimbursable funds for touristic-oriented beneficiaries from the Gorj county. Through the usage of academic questionnaire and interview methods I will seek to showcase the added value brought by the investments, main problems and challenges faced both at the implementation or exploitation levels for the investments made in touristic infrastructure development, alongside the real level of touristic and revenue indicators generated by this activity sector.