The Nexus Between European Funds, Economic Growth, and Government Quality in the EU

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ABSTRACT

The purpose of this paper is to identify the contextual associations between the absorption of European funds, economic growth, and the quality of governance. The structural funds of the European Union support the strengthening of the economies of its Member States. The efficient use of these funds is achieved through high-quality governance; however, efficient governance presupposes a stable and developed economy.

Design/Methodology/Approach: The methodological background comprises a qualitative sequential approach involving a literature review and empirical analysis that provide coherence and viability for the study. We mainly employ quantitative methods, including an econometric model based on panel data for European countries over the period 2007–2020, which represents a novel approach in the literature.

Findings: The empirical results indicate a positive relationship between the European funds absorption rate, economic growth, and institutional governance factors.

Cigu, E., Iacobuți, C.-S., Bercu, A.M. (2025). The Nexus Between European Funds, Economic Growth, and Government Quality in the EU. Central European Public Administration Review, 23(1), pp. 157–180 Originality/Value: The article may be considered a useful contribution to understanding the complex relationship between European funds, government quality, and economic growth, thus adding to the existing literature.

Keywords: economic growth, European funds absorption, government quality

Povezava med evropskimi sredstvi, gospodarsko rastjo in kakovostjo upravljanja v EU

POVZETEK

Namen tega prispevka je opredeliti kontekstualne povezave med črpanjem evropskih sredstev, gospo-darsko rastjo in kakovostjo upravljanja. Strukturni skladi Evropske unije podpirajo krepitev gospodar-stev držav članic. Učinkovita uporaba teh sredstev je dosežena z visokokakovostnim upravljanjem; ven-dar učinkovito upravljanje predpostavlja stabilno in razvito gospodarstvo.

Zasnova/metodologija/pristop: Metodološko izhodišče temelji na kvalitativnem zaporednem pristo-pu, ki vključuje pregled literature in empirično analizo, kar zagotavlja koherenco in izvedljivost študije. Pretežno se uporabljajo kvantitativne metode, vključno z ekonometričnim modelom na podlagi panelnih podatkov za evropske države v obdobju 2007–2020, kar je nov pristop v literaturi.

Ugotovitve: Empirični rezultati kažejo na pozitivno razmerje med stopnjo črpanja evropskih sredstev, gospodarsko rastjo in institucionalnimi dejavniki upravljanja.

Izvirnost/vrednost: Članek je uporaben prispevek k razumevanju kompleksnega odnosa med evropskimi sredstvi, kakovostjo upravljanja in gospodarsko rastjo ter tako dopolnjuje obstoječo literaturo.

Ključne besede: gospodarska rast, črpanje evropskih sredstev, kakovost upravljanja

JEL: H11, I38, O52, O47

1 Introduction

The Structural and Investment Funds of the European Union (EU) are designed to support the goal of convergence, benefiting mostly poorer states or regions (Atunes et al., 2020). This major objective is accompanied by the action of absorbing these funds as the percentage of EU funding that has been paid by the European Commission to member states' Operational Programmes (OPs) at a certain point in time (European Parliament, 2024). The Structural and Investment Funds have experienced changes throughout history, either by adding new funds following the resolution of some problems encountered with the accession of several states to the European Union or by changing their structure following the prioritization of new visions of political and economic at the European level. Since the 2000–2006 funding period, the changes began to be major with the expansion of the

European Union to eastern Europe, the states that joined in that period being developing states and therefore with a much-reduced economic power compared to old member states, as Dornean (2016) mentioned also. As a rule, absorption tends to start slowly, and then it accelerates in the last years of programming. Since the 2000–2006 funding period, the changes began to be major with the expansion of the European Union to Eastern and Central Europe, the states that joined in that period being developing states and therefore with a much-reduced economic power compared to the West member states, as Dornean (2016) mentioned also. The real period in which developing states entered the world of European structural and investment funds was the period 2007–2013, a period in which three other states joined: Romania and Bulgaria at the beginning of the financing period (2007), and Croatia at the end of the period (2013). These three countries had the lowest absorption rate because the institutional and procedural infrastructure for attracting funds required a transition period, which determined that the funds were absorbed towards the end of the Multiannual Financial Framework 2007–2013. The administrative capacity of these states (Bulgaria, Croatia, Romania) gradually improved, and in the next Multiannual Financial Framework 2014–2020 were the results evident, including from the perspective of the degree of absorption of European funds. The extension in question has generated major interest, and some studies have been written on the impact that European funds have on the new member states (Albulescu and Goyeau, 2013; Achim and Borlea, 2015; Tigănasu et al., 2018; Surubaru, 2020, Vukasina et al., 2022).

In our paper, we will investigate the two funding periods, 2007–2013 and 2014–2020, creating an overview of the absorption of funds which allows us to identify real developments, in particular regarding the member states who joined the EU starting with 2004, given the fact that not only the economic power results in poorer performance but as countless factors can also cause fund absorption discrepancies. In this context, we intend, through this paper, to find out not only whether the European structural funds lead to economic and sustainable growth but also if the economic and institutional factors affect or support the increase in the degree of absorption. The methodological background includes qualitative sequential methodology, literature review, and empirical analysis that provides coherence and viability for our study, but also quantitative methods, including an econometric model based on panel data for the European countries over the period 2007–2020.

In terms of the structure of the paper, the next section examines the literature regarding the researchers' approaches and the results obtained. Section 3 describes the method, variables, and data sources; Section 4 summarizes the results of the empirical study conducted on 27th European countries over the period 2007–2020; and Section 5 outlines the conclusion, the main findings, their implications, and potential policy implications.

Literature Review

The European Parliament (2024) identified some factors as barriers to the absorption both at the level of the European Union (delays in adopting a legal framework for the Multiannual Financial Programme) and at the level of the eligible states (limited quality of government, limited administrative capacity, inefficient institutional structures, training gaps, low public administration workforce engagement, inadequate practices and procedures for the selection of operations, and insufficient digitalization). Among these factors, administrative capacity at national and regional levels is one of the key factors in explaining the different performances of the Cohesion Policy in Europe (Smeriglio et al., 2015) and being identified by literature (Incaltarau et al., 2020; Kersan-Škabić et al., 2017, OECD, 2020, Tigănasu et al., 2018) as one of the most frequently emphasized factors correlating with high absorption rates. Absorption drivers related to administrative capacity include the quantity (total staff and turnover) and quality (competencies and skills) of human resources in the public administrations in charge of programming, implementing, monitoring, and controlling interventions (European Parliament, 2024).

According to OECD (2023), good governance is under the auspices of 32 recognized Principles and 270 sub-principles developed by SIGMA (starting with 2014) at the request of the European Commission (EC) on six thematic areas that can guide reform efforts to ensure adequate administrative capacity: (i) strategy; (ii) policy development and coordination; (iii) public service and human resource management; (iv) organization, accountability, and oversight; (v) service delivery and digitalization; and (vi) public financial management.

A large series of studies has suggested that the economy of a state can be directly affected by the poor quality of public administration and, therefore, of public institutions, alongside which there can be a present level of corruption (Mauro, 1995; Paldam, 2002) and which harm the increase in the number of investments (Gundlach and Paldam, 2009; Franco de Lima and Maciel-Lima, 2021). Other studies show that the previously mentioned factors can negatively impact the performance and development of enterprises (De Rosa et al., 2016; Achim, 2017). Achim and Borlea (2015) argued that the economic and sustainable development of a state can be directly affected by the quality of institutions and the current level of corruption.

Looking at the European level, European funds represent one of the main ways of economic and sustainable development of the member states, especially concerning the Central and Eastern European states that joined in 2004 (Cyprus, Malta, the Czech Republic, Estonia, Latvia, Lithuania, Poland, Slovakia, Slovenia, and Hungary), 2007 (Romania and Bulgaria), respectively 2013 (Croatia), developing countries compared to the existing Member States at the time. As a result, special attention was paid to the impact that the European structural funds have on the economic growth of the member states. in particular after the period 2000–2006, respectively 2007–2013, the latter being the period of the union of the democratic states and the states from the former communist bloc.

Some studies have focused on finding explanations for how European Union funds are allocated to member states (Kemmerling and Bodenstein, 2006; Zaman and Georgescu, 2009; Dellmuth, 2011; Delmuth and Stofell, 2012; Bachtler et al., 2014; Albulescu and Goyeau, 2013; Tosun, 2013). These studies revealed many factors that influence the degree of absorption of European funds, such as the administrative capacity of public institutions, the level of socio-economic development of the member states, the degree of excessive bureaucracy, the level of inter-institutional coordination, the efficiency of public-private partnerships, the degree of available resources regarding project financing. Grecu (2009) identified a series of obstacles regarding the higher absorption of European funds, such as excessive bureaucracy, the reduced degree of decentralization, and the "heavy" normative framework regulating the financing and implementation of projects.

Some authors have focused on the implications of the absorption of European funds at the regional level within the European Union states (Kirbis, 2009; Albulescu and Goyeau, 2013; Tosun, 2013; Calinica, 2020). They focused on the impact of funds from the European Regional Development Fund, structuring the impact into two categories, namely: i) the impact on the states that joined in 2004, 2007, and 2013, and ii) the impact on the older member states. These two categories are justified by the authors that the new member states have much weaker economic development power, with major regional disparities.

At the same time, some authors in question discovered a series of advantages regarding the absorption rate of European funds at the regional level within the developing states. Albulescu and Goyeau (2013) argued that the increase in the gross domestic product (from the previous year) does not have a direct negative impact on the ERDF absorption rate because the old Member States show a higher degree of economic growth. A similar result was also obtained by Tosun (2013), arguing that states with a high power of economic development tend to absorb a larger amount of the funds in question, but which do not imply a significant impact within a strong economy developed. However, Tosun (2013) identified an impediment for the new member states because some factors, such as their administrative capacity, were not so strong to face and apply as effectively the requirements imposed by the European Union. This theory is supported by Sedelmeier (2008), Bailey and De Propis (2004), and Cartwright and Batory (2012) too.

In the same context, Kirbis (2009) claims that the policy attributed to regional development through the use of European funds does not significantly contribute to reducing the disparities between the regions of the member states, the regional policy does not contribute to the facilitation of economic growth, while other authors claim that, despite the disparities between regions, there is a long-term positive effect on gross domestic product and implications for reducing the unemployment rate.

Other authors have focused on the Cohesion Fund and the impact it had on the states of Eastern Europe, being an instrument focused on reducing dis-

parities between the regions of all member states and, at the same time, promoting economic and sustainable development (Grusevaja and Pusch, 2011; Albulescu and Goveau. 2013: Hapenciuc et al., 2013). Although all states tend to have regions with an economy below the European Union average, the concern regarding the states that joined from 2004 to 2013 arises from most of the Regions of these states being below the economic average at the European level, finding a problem not only locally, but also nationally. In this context, the Cohesion Fund complements the European Regional Development Fund to have real results in reducing disparities between regions and, at the same time, to have the capacity to support economic growth at the level of each state. Santos et al. (2024) focused on the analysis of cohesion policy for the period 2014–2020 and concluded that the absorption of funds could be significantly improved through increased flexibility in spending rules and the adoption of more tailored strategies.

In the work of Mihăilescu (2012), the role of public institutions regarding the degree of absorption of European funds has a significant impact. Mihăilescu (2012) shows that states with a high level of corruption are a major factor contributing to the low absorption rate in the European Union. Grusevaja and Pusch (2011) also used corruption (corruption perception index) as a variable to demonstrate the lower degree of absorption. Grusevaja and Pusch's (2011) work was focused on the Central and Eastern European states that joined in 2004. The difference between the two works previously mentioned is the corruption index variable used where Mihăilescu (2012) opted for the corruption control indicator of the World Bank's Worldwide Governance Indicators, while Grusevaja and Pusch (2011) decided to use the perception index of corruption.

The study of Kersan-Skabic and Tijanic (2017) also used the corruption perception index. The novelty of the study was the use of a dummy variable, demonstrating that a high degree of corruption at the institutional level leads to the attraction of reduced European funds compared to states with a low degree of corruption (p<0.01).

Albulescu and Goyeau (2013) adopted a different perspective on the absorption of funds from the Cohesion Fund. Unlike the previously cited studies, they opted to utilize the average growth rate of gross domestic product (GDP) instead of GDP per capita. They argued that the economic growth rate from the previous year substantially impacts the current year's absorption of European funds. Albulescu and Goyeau (2013) findings indicate a significant relationship at the 1% level (p=0.003<0.01). Another innovative aspect of Albulescu and Goyeau's (2013) work is the use of the economic sentiment indicator variable, showing if the general investor perception improves, there is a greater willingness to invest, therefore resulting in a high absorption rate (p=0.000<0.01). The authors decided, thus, to analyze the impact of the Cohesion Fund (CF) together with the European Regional Development Fund (ERDF) because in the period 2007–2013 (the period of analysis of the research paper), the CF would be applied within the first objective called "convergence" of the Multiannual Financial Frameworks 2007–2013. The convergence objective consists of "ensuring economic growth and employment by increasing the quality of infrastructure and human capital investments. developing the information society and supporting innovation, adaptability to economic and social changes, protecting the environment and improving environmental conditions and increasing administrative capacity" (Dornean 2016). This objective was applied to regions with GDP below 75% of the EU average, a target that overlaps with that of the European and Regional Development Funds and explains the relevance of approaching these two funds within the same study.

The advantage of carrying out a study on the impact of resources from the Cohesion Fund on the economy of a state emerges from its importance that has grown substantially over time, with the expansion both from the perspective of the number of states and from the perspective of demographic factors (population, territory), in especially concerning the last three waves of accession, states that presented an economy much lower than the existing member states, these providing an addition to the gross domestic product of the organization of approximately 5% (Dornean 2016). Based on the above, it is clear that the Cohesion Fund would be used strictly within the new member states, the primary eligibility criterion to benefit from its resources is the gross national income (GNI) does not exceed 90% of the resulting average at the European Union level. On the other hand, the strict analysis of the Cohesion Fund leads to a restrictive database, both from the perspective of the number of states that can be analyzed and the period covered. The explanation of the authors Albulescu and Goyeau (2013) regarding why they did not choose the period 2000–2006 was for two particular reasons, the first being the way of structuring regarding the objectives and the allocation of funds was modified as a result of the EU enlargement, and the secondly the database that could be relevant in their study is partial, the enlargement taking place in the middle of the execution of the program from 2000–2006.

Hapenciuc et al. (2013) addressed the issue related to the degree of absorption within ten states (Estonia, Lithuania, Latvia, Hungary, Slovakia, Slovenia, Czech Republic, Poland, Bulgaria. and Romania), analyzing the period 2007– 2011, making a linear correlation for each year between gross domestic product and contracted grants. Thus, the authors identified that in the first 2 years, the correlation did not show a strong link between the two variables, finding that the link became significant in the years 2009, 2010, and 2011. They thus identified that a cause of the growing link year by year is due to the administrative and financial capacity to implement the established projects, finally arguing that the attraction and use of European resources significantly depends on the ability of the authorities at the level of each state to make decisions as efficient as possible and, at the same time, to be under the criteria imposed by the European Union.

As a result of analyzing the studies carried out by the previously mentioned researchers, we can conclude that the impact created by the event in which

the largest expansion in the history of the European Union took place (2004 – 10 states) and later two other states in the same geographical area (2007 - Romania and Bulgaria) led to a large series of scientific works to identify the impact of the absorption of the European structural funds on the underdeveloped states and at the same time, which can be the factors involved in the increase or decrease of an absorption rate in consequence. The EU-15 (traditional countries of the European Union) had a high level of absorption capacity for structural funds, which, as the European Union continued to expand, gradually resulted in a decline in the average absorption rate, resulting from factors such as a level of low economic growth of the member states, an inefficient or weakly decentralized administrative system, the high degree of corruption or a regulatory framework not adjusted towards sustainable and efficient economic growth.

A series of scientific papers also concerns the Romanian state and its economic evolution since its accession to the European Union, with the demonstrative aim of demonstrating its evolution through the involvement of European structural funds.

A study that stands out among the ones mentioned above is that of Marinas and Prioteasa (2015), who consider the impact of the European Social Fund on the Romanian state, analyzing the issue of the absorption rate from the perspective of 3 main indicators: the attractiveness rate for potential beneficiaries regarding the access and use of European funds (calculated as the fraction between the requested grants and the amount of planned allocated funds), the success rate (calculated as the fraction between the contracted grants and the requested grants) and the quality of the use of the grants. The authors wanted to demonstrate which are the impediments at the administrative level that cause the last position that Romania represents regarding the degree of absorption at the EU level. Thus, following the results obtained, they concluded that the low level of absorption in the case of Romania is determined by the management that is not optimized in using the funds obtained effectively, the cause in the case being a high degree of political interference that is not justified and that leads to erroneous management of resources.

Lucian (2021) analyzed the impact that European structural funds can have on Romania with the increase in the absorption rate, arguing that at the administrative level, the decisions taken did not take into account the vision and objectives at the level of the union in the period 2007–2013, resulting of reduced decision-making transparency, non-compliance with operational procedures, leading to inefficient implementation of the resources obtained. Although in the period 2014–2020, the European Union imposed a set of rigid rules, which did not have a major impact on the performance regarding the management of funds, the Romanian state suffered from a lack of communication and cooperation at the interinstitutional level, which led, according to the author, to massive delays regarding the approval of projects by the European Commission.

A noteworthy approach in the analyzed studies is identifying the absorption rate of structural funds as a factor of economic growth, a method that we consider the most relevant and comprehensive.

Jureviciene and Pileckaite (2013) analyzed the impact of the European structural and investment funds on the specifics of Lithuania, wanting to demonstrate the potential impediments that can cause a much lower absorption rate than expected. A unique aspect to mention is that the authors have identified, based on their research, diminished attention paid by the European Union to the states with a small territorial area. Most of the states in this spectrum benefit from the necessary funds from a national perspective and are not categorized by region. Such an approach inevitably leads to the provision of funds in often erroneous amounts and with imprecise destinations. Some risks can lead to implementing the initially established projects (e.g., weak interinstitutional communication, reduced administrative capacity, reduced decision-making transparency, and the inability to specifically monitor each project and its destination). The authors, in this case, focused primarily on three aspects: (i) the impact of greater absorption of European funds on foreign direct investments, (ii) the degree of influence of European funds on government investments in gross fixed capital, and (iii) the level of experience of businesses regarding the importance of external support through European funds. The researchers were able to demonstrate, based on a correlation matrix, that a higher rate of absorption of funds used for economic and competitive growth leads to a higher rate of foreign direct investment.

The approach of Achim and Borlea (2015) directly involves the Worldwide Governance Indicators (WGI) developed by the World Bank, arguing that a greater absorption of European funds is strongly influenced by the administrative capacity, respectively the quality of public institutions in attracting them and use effectively. As a result, the authors performed a series of 6 linear regressions using the absorption rate of European structural funds as the dependent variable and the previously mentioned indicators as independent variables (voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, control of corruption), using the Ordinary Least Squares (OLS) calculation method. The authors' results conclude that 5 of the 6 variables significantly influence the degree of absorption of European funds (voice and accountability; government effectiveness; regulatory quality; rule of law; control of corruption, the exception being political stability and absence of violence variable.

Similarly, the approach of Incaltărău et al. (2020) highlights the importance of administrative capacity and, at the same time, some political factors regarding a higher rate of absorption of European funds, using 4 of the Worldwide Governance Indicators (government effectiveness, regulatory quality, political stability, and corruption control), the econometric results, in this case, demonstrating a significant relationship only in the case of government effectiveness and corruption control.

In a later paper by Roman et al. (2023), the authors focused strictly on the degree of corruption and fraud carried out at the level of public institutions as the cause of a low absorption rate, repeatedly arguing that an unethical and moral performance at the administrative level leads to economic growth in continuous stagnation. The study shows, in the analyzed period 2014–2020, based on a two-level regression (fraud indicator regarding European funds and corruption control), that the first model (using the fraud indicator) has a strong influence on absorption rate while the second model (using corruption control) does not show an influence on the increase or decrease of the dependent variable. The authors argue that the second model resulted in an insignificant relationship because corruption control was used as a subjective alternative to represent fraud, compared to the first model, where they used an objective indicator, advising researchers to use indicators based on facts and not on perception.

An important aspect to mention is the fact that regardless of the method of approach of the researchers mentioned in this scientific paper, a common point in all the analyzed studies is represented by the impact that the European structural funds have on economic and lasting growth. Thus, most of the papers analyzed presented the gross domestic product as the main indicator, either per capita or as a percentage of the average growth from year to year, highlighting the fact that the primary purpose of the structural and investment funds is to develop the member states of the European Union from an economic point of view and to maintain this growth in the long term.

3 Data and Method

Our study considers 27 states (EU members, Great Britain excluded) and analyzes the periods programmed for the allocation and use of European structural funds, more precisely, 2007–2013 and 2014–2020, using the World Bank database (2024).

Thus, the purpose of the work will be verified by implementing three main hypotheses:

- Hypothesis 1: The rate of absorption of European Structural Funds will increase if the average GDP of the previous year has increased.
- Hypothesis 2: There is a strong link between the quality of institutions (corruption perception index, government effectiveness) and the degree of absorption of European structural funds and economic indicators (average GDP, inflation, economic sentiment indicator).
- Hypothesis 3: There is a strong link between inflation, public institutional guality, and the degree of absorption of European structural funds.

Our paper will consider using a multi-level econometric model using OLS (Ordinary Least Squares), representing the most used and recommended econometric model in the previously studied research papers. At the same time, the regression analysis will be carried out using the methodology with fixed effects on all levels (cross-fixed effects). According to Albulescu and Goveau (2013), such an approach allows the variables taken in the analysis not to be omitted, in the case of using temporary fixed effects, the features not observed by OLS that fluctuate over time but which are common to all states, will be taken into account.

We can observe the variety of the works analyzed above, which allows us to identify each method of approaching the impact of the absorption rate and identify numerous indicators and their influence on the results obtained by the authors in question. Thus, using a regression using OLS allows us to consider more variables, resulting in more accurate results. At the same time, it allows us to demonstrate not only the impact of the absorption rate on economic growth (average GDP) from year to year but also the economic and institutional factors that influence the rate in question.

First of all, the reason to analyze not only one funding period but two funding programs is to capture how the states in the last three waves of accession have evolved, given the fact that, according to Hapenciuc's et al. (2013) results, the states of Central and Eastern Europe needed time to adapt to the European system and to create an institutional framework and at the same time an approach that would allow the absorption and use of funds as efficiently as possible. At the same time, a similar view was in the case of the study by Albulescu and Goyeau (2013), who considered taking into account the previous funding period (2000-2006), the argument for which they decided not to include it being that the structure of the funds, the objectives of each fund and the way of allocation and prioritization of needs at the level of the new member states have changed significantly.

Secondly, the analysis of the absorption rate on two funding programs represents the novelty of our work, given the fact that, according to the research of the large number of studies presented previously, the authors analyzed only one programming period. Thus, the argument of an analysis of this kind consists in the fact that only one state acceded in the middle of the analysis period (Croatia – 2013), something that did not affect or change the structure of European funds, having previously experienced the waves of accession from 2004 and 2007. Another argument can also be identified in the specialized literature (Dornean 2016), where we could observe that although there is a degree of allocation from the EU budget of structural and investment funds, the objectives have remained the same but just adapted in a minimalist way.

We use our analysis data taken from a series of databases, the absorption rate of the European structural and investment funds (AbsR) of the 27 states was taken from the database made available by the Cohesion Open Data Platform (European Commission, 2024a). The gross domestic product average (GDPaverage), along with the inflation rate (Infl), were taken from the World Bank database (World Bank, 2024). The World Bank made available the world governance indicators, from which we extracted one of the six indicators, namely government effectiveness (GE) (its value being between -2.5, meaning weak effectiveness, and +2.5, meaning high effectiveness) (World Bank, 2024). The indicator of economic sentiment (ESI) was taken from the official website of the European Commission (2024b), in the Economy and Finance section, and the last indicator, the perception of corruption index (CPI), was taken from the database of the Global Anti-Corruption Organization (Transparency International, 2024). The variables are described in Table 1.

To perform the 3-level regression analysis and implicitly test the hypotheses, we used the following equations:

AbsR =
$$\alpha + \alpha 1 \cdot GDPaverage(-1) + \alpha 2 \cdot CPI + \alpha 3 \cdot ESI + \alpha 4 \cdot Infl + \alpha 5 \cdot GE + \epsilon$$
 (1)

$$CPI = \alpha + \alpha 1 \cdot GDPaverage + \alpha 2 \cdot AbsR + \alpha 3 \cdot ESI + \alpha 4 \cdot lnfl + \alpha 5 \cdot GE + \epsilon$$
 (2)

Infl =
$$\alpha + \alpha 1 \cdot GDPaverage + \alpha 2 \cdot CPI + \alpha 3 \cdot ESI + \alpha 4 \cdot AbsR + \alpha 5 \cdot GE + \epsilon$$
 (3)

Where: AbsR – absorption rate of European structural and investment funds: GDPaverage – the average growth rate of the gross domestic product; CPI – corruption perception index; ESI – economic sentiment indicator; Infl – inflation rate: GE – government effectiveness.

Table 1. Description of the variables

Variable	Description	Source	Expected Sign
GDPaverage	represents the average GDP growth rate of each state in the analyzed period and contributes to the evolutionary degree of GDP from year to year	World Bank, 2024	+
СРІ	represents the current level of corruption in the analyzed period in each state based on an accurate evaluation by some experts and at the same time through an opinion poll, the main axis being the public sector. The index is measured inversely, meaning that the higher the index, the lower the degree of corruption	Transparency International, 2024	+
ESI	involves the perception of investors regarding the eco- nomic context and whether it allows the realization of in- vestments or not, otherwise the economic level of a state can stagnate and even stop a potential economic recovery	European Commission, 2024	+
Infl	it essentially represents the devaluation of the national currency which fundamentally affects the price of goods and services, affecting in this case not only the amount of European structural funds allocated, but also their real value	World Bank, 2024	-
GE	it is directly related to the perception of the level of quality of public services offered by each state, along with which the level of independence from political pressures is taken into account, including the quality of formulating, implementing and respecting public policies	World Bank, 2024	+

Source: computed by authors

Results and Discussions 4

First, we will consider the degree of absorption of European funds at the end of each period, 2013 and 2020, respectively, to identify the difference in the absorption rate mainly between the states that joined before 2004 and, therefore, the states that joined after 2004 (Figures 1 and 2).

68,81%

Figure 1. The absorption rate in EU member states during 2007–2013.

Source: computed by authors, based on the European Commission (2024) database

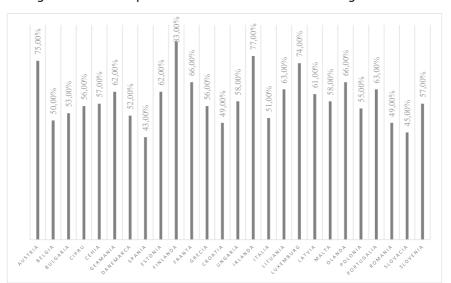


Figure 2. The absorption rate in EU member states during 2014–2020

Source: computed by authors, based on the European Commission (2024) database.

According to Figures 1 and 2, developing countries had a much lower absorption rate than developed countries at the end of the period 2007–2013, with the lowest values belonging to Croatia (18.27%) and Romania (38.31%). In the case of Croatia, such a rate is justified by the simple fact that the year of accession is the same as the year in which the financing period ended. An important aspect to mention is that Bulgaria, although it joined the EU at the same time as the Romanian state, managed to absorb approximately 50% of the total structural funds allocated. On the other hand, the states with the highest absorption rate at the end of the first analyzed period are Estonia (81.28%), followed by Lithuania (78.77%) and Portugal (78.67%).

It is important to state that in the papers carried out on the analysis of the 2000–2006 financing program (Tosun, 2013), they highlighted the fact that the degree of absorption in the period 2007–2013 of the new member states was higher than the absorption rate of developed states before subsequent waves of accession. This fact is even more evident if we refer to the later period, 2014–2020, where we can observe the fact that in the case of the states with the lowest rate of absorption in the previous period, in 2020, Croatia and Romania had a degree of absorption cumulatively 49.00% of the total allocated funds, while in the case of Estonia, Latvia, and Portugal, the rates decreased to 62%, 63%, and 63%, respectively.

Secondly, in an analysis of this type, a descriptive statistic (Table 2) must be included to identify the level of equality of the data distribution in the sample. Two data measurement methods, Skewness and Kurtosis, must also be used.

Table 2. Descriptive statistics of the absorption rate and economic and institutional indicators.

Variable	Obs.	Mean	Median	Std.Dev.	Min	Max	Skew.	Kurt.
AbsR	378	0.59	0.69	0.37	0.00	1.00	-0.34	1.48
GDPaverage	378	0.01	0.01	0.04	-0.14	0.24	-0.41	7.14
CPI	378	6.32	6.10	1.59	3.30	9.40	0.21	1.93
ESI	378	97.57	101.00	14.40	38.40	133.40	-1.06	4.66
Infl	378	1.82	1.50	2.07	-4.50	15.40	1.88	10.94
EG	378	1.07	1.03	0.58	-0.36	2.35	-0.19	2.45

Source: computed by authors using eViews.

Note: Skewness is a statistical method that measures the degree of asymmetry between the data within the sample, – meaning that the distribution is skewed to the left (Negative Skewness), and it follows that the median is likely to have a greater value than the mean, while + is skewed to the right (Positive Skewness) and it follows that the mean is more likely to have a greater value than the median. Kustosis is a method of measuring data within the

sample that reveals the highest statistical point based on its frequency in the data distribution, Mesiokurtic=0, Platykurtic<0, Leptokurtic>0.

According to Table 2, we can observe through descriptive statistics that the average rate of absorption of European structural funds is only 0.59% within the 27 member states, with a minimum of 0% and a maximum of 1%. The reason why the average is so low is that, according to Figure 1 and Figure 2, the absorption rate is taken individually for each program, thus creating two distinct developments. This can also be demonstrated by the average of the independent variables, where the corruption perception index shows an average of 6.32, the economic indicator shows an average of 97.57, the inflation rate of only 1.82%, and implicitly the effectiveness of the government of 1, 07, the data in question not being taken individually for each program, but as an evolution from 2007 to 2020. However, the lowest average represents the increase in the gross domestic product (0.01%), given the fact that there is a series of determining factors of an evolution that can affect its growth, such as the crisis that appeared at the end of 2007 and that had effects over a long time on the economy or the pandemic period that manifested itself in 2020. the growth of the gross domestic product in these years being negative.

Referring to the Skewness measurement method, we can see that the data sample is tilted to the left in the case of the absorption of European funds (-0.34), the average growth of the gross domestic product (-0.41), the economic sentiment indicator (-1.06) and the government effectiveness indicator (-0.19). The positive trends were found in the corruption perception index (0.21) and the inflation rate (1.88). A left-skewed (or negatively skewed) distribution indicates disparities in the country's capacity for EU fund absorption, GDP growth, the economic sentiment indicator, and the government effectiveness indicator. This means that a majority of beneficiary countries are performing well in terms of fund absorption. GDP growth, and government quality, but there are countries (such as Romania, Bulgaria, etc.) that struggle with lower absorption rates, lower administrative capacity, and/or GDP growth. The economic sentiment indicator presents differences from country to country. In this context, policymakers may focus their efforts on understanding and addressing the implementation challenges faced by lower-performing countries.

Measuring the data using the Kurtosis method shows that all variables are on a generally positive curve, with the highest frequency found within the inflation rate (10.94>0=Leptokurtic). The Leptokurtic distribution implies heightened risk and potential volatility in how EU funds are used, which may complicate forecasts and planning for the next programs. This indicates a need for targeted interventions to support projects or countries with lower absorption rates, lower administrative capacity, and lower economic performance.

Understanding these distribution types combined (left-skewed distribution and Leptokurtic distribution) can quide governments and agencies in future resource allocation, ensuring that additional support is provided to countries where absorption is lacking. In this context, programs might be needed to

enhance the capacity of lower-performing countries to better absorb funds in the future.

However, the left skew and leptokurtic nature of EU fund absorption, GDP growth, and government effectiveness underscore the diverse performance levels among countries and suggest a need for targeted support and strategic policy adjustments to enhance overall effectiveness.

To validate the regression analysis by examining the link between the dependent variable (the absorption rate of European funds) and the independent variables, we created a correlation matrix to identify the significance of the connection between them.

Variables **AbsR** GDPaverage CPI **ESI** Infl EG AbsR 1.000000 0.073845 0.080551 0.434615 -0.503581 0.005287 *GDPaverage* 0.073845 1.000000 -0.008131 0.507630 0.123274 -0.038264 CPI 0.080551 -0.008131 1.000000 0.075038 -0.183419 0.924833 **ESI** 0.434615 0.507630 0.075038 1.000000 -0.409103 0.051303 Infl -0.503581 0.123274 -0.183419 -0.409103 1.000000 -0.192350 0.005287 -0.038264 0.924833 0.051303 -0.192350 1.000000

Table 3. Correlation matrix between variables.

Source: computed by authors using eViews.

Thus, Table 3 shows a modest connection between the dependent and independent variables (GDPaverage=0.073; CPI=0.080; ESI=0.434; Infl=-0.503; GE=0.005). The strongest links are represented by the absorption rate and the economic sentiment index, which indicate a positive correlation, and the absorption rate and the inflation rate, which indicate an inverse correlation.

Although the correlation between the dependent and independent variables is not very strong, the results in question reveal that each independent variable can explain the evolution of the absorption rate of European funds in the analyzed financing periods.

At the same time, by analyzing the correlation, we can support that the connection is strong and direct between the independent variables whose indicators are economic (average GDP, economic sentiment indicator, inflation rate), which, about institutional indicators, the relationship is reduced and inverse. We find the same pattern in the case of the link between the institutional indicators, the relationship being direct and significant. The link tends to be inverse and relatively reduced regarding economic indicators.

The next step is the regression analysis between the variables, using the Ordinary Least Squares (OLS) method on three models. These models consider changing the dependent variable with an independent variable. Although several studies contain a regression analysis on several models, such as Albulescu and Goyeau (2013), who carried out a regression at the level of all member states, at the level of old member states, at the level of new member states, at the level of taxpayers and the level of beneficiaries, a method of this kind has not yet been applied following our research. So, an approach of this kind represents the main innovative factor of our scientific work, and according to the results, there is an extremely strong significance within the three regression models.

One of the reasons why we chose to use such a method relates to the role that the European structural funds and implicitly their absorption have on societies. The European funds act in the form of objectives assigned individually or through collaboration with the main structural and investment funds. Based on their objectives assigned and thanks to a large number of research studies, we were able to identify that there are countless factors that positively or negatively influence the degree of absorption. However, European funds are also an instrument that positively or negatively influences the same economic and institutional factors (European Parliament 2023). According to this report, the absorbed European funds represent an economic stabilization tool. In our research, European funds can be an inflation stabilizer capable of developing the commercial market, diversifying the competition, and ultimately leading to the correct prices that respond to market competitiveness.

Numerous studies have highlighted corruption as a key factor contributing to low absorption rates (Incăltărău et al. 2020, Roman et al. 2023). At the same time, we consider that the degree of European funds' absorption can diminish corruption among member states.

We check for multicollinearity using the Variance Inflation Factor (VIF). According to the theory, VIF values between 2 and 5 suggest low evidence of multicollinearity, and values above 5 (or 10 in some cases) indicate a problematic level of multicollinearity. Our values are under 2, showing no multicollinearity.

According to the regression results, the probability (F-statistic) shows us a level of statistical significance at the level of the three models and implicitly of the entire regression analysis (0.000), demonstrating that the dependent variables within each model are significantly influenced by the independent variables at a 1% probability level. We identified running the three models that variables are highly statistically significant with a probability below 1% (p<0.01), which proves the previously supported arguments, namely that the rate of absorption of European funds is not only significantly influenced by the independent variables, but that it is also influenced both by economic factors with a probability of 0.000 (p<0.01) and by institutional factors with the same probability found. Thus, with model 2, we can conclude that the statistical link is significant and inverse between the dependent variable *Infl* and the independent variable AbsR, meaning that if the absorption rate increases by 1%, then the inflation rate will decrease by 1.783%. In the case of model 3, the influence of AbsR is not so great, but it shows a direct and positive statistical link, where if the absorption rate increases by 1%, then the corruption perception index will increase by 0.243% (CPI denotes a level of corruption less present as it increases, hence the positive result). Referring to the adjusted R-squared, we can reveal the fact that both models are statistically significant (model 2=0.51, model 3=0.77, where p>0.50 is statistically significant).

Table 4. Regression results.

Variables	Model 1	Model 2	Model 3
	AbsR	Infl	CPI
AbsR		-1.783*** (0.000)	0.243*** (0.000)
GDPaverage(-1)	3.258***	20.262***	2.389***
	(0.000)	(0.000)	(0.000)
СРІ	0.160*** (0.000)	-0.646*** (0.000)	
ESI	0.011***	-0.071***	-0.007***
	(0.000)	(0.000)	(0.000)
Infl	-0.053*** (0.000)		-0.034*** (0.000)
GE	-0.669***	-1.865***	0.907***
	(0.000)	(0.002)	(0.000)
С	-0.766***	15.689***	5.959***
	(0.005)	(0.000)	(0.000)
R-squared	0.617	0.557	0.806
Adjusted R-squared	0.578	0.515	0.778
Durbin-Watson stat.	0.588	1.272	0.696
F-stat.	0.000	0.000	0.000
N	334	334	334

Source: computed by authors using eViews.

Note: ****** refers to how significant the statistical probability is that the dependent variable is influenced by the independent variable, '*=10% where p<0.1, **=5'% where p<0.05, ***=1% where p<0.01. To reveal the influence that the average growth of the gross domestic product has on the degree of absorption of funds, we used the lag function (-1), which shows the impact that the average GDP of the previous year has on the rate of absorption in the current year.

The first model and the most representative in this study shows us that the first hypothesis is confirmed by the simple fact that the increase in the average GDP strongly influences the increase in the absorption rate. According to the first model, if GDP increased by 1% in the previous year, then the absorption rate will increase by 3.258%, having a statistical probability of 1%, a similar result revealed in other studies (Albulescu and Goyeau, 2013), showing an increase in the absorption rate through the GDP growth of the previous year of only 0.183%.

We can conclude the second hypothesis as also confirmed, where we can see that both the economic sentiment indicator (CPI) is statistically significant, as well as the inflation rate, the relationship is inverse in this case, both having a probability of 1%. Thus, if the ESI increases by 1%, then the absorption rate will increase by 0.011%, and if the inflation rate increases by 1%, then the absorption rate will decrease by 0.053%.

In the case of institutional indicators, we can see that the corruption perception index is statistically significant, having a direct relationship with the absorption rate, where if the CPI increases by 1%, then the absorption rate will increase by 0.160%. Conversely, government effectiveness although with a statistical probability of 1%, the relationship is significant but inverse, meaning that a 1% increase in government effectiveness leads to a decrease in the absorption rate of 0.669%. On the other hand, Achim and Borlea (2015) obtained a direct and significant result, the absorption rate in their case increasing by 9.41% at a statistical probability of 5%, thus resulting in the partial confirmation of hypothesis 3. An argument for which governance effectiveness can affect the absorption rate refers to the administrative activity that increases with the allocation and use of European funds, consequently leading to a burden on the administrative system by expanding the bureaucracy, thus causing delays regarding the approval of projects and in many cases the postponement to the following budget year, or the cancellation the projects themselves, an argument supported and proven in the study by Marinas and Prioteasa (2015).

This study has some limitations, considering it needed to fully explore the contextual association between the absorption of European funds, economic growth, and quality of governance. Therefore, further studies are required to address the gaps by incorporating more variables to establish the future absorption rate of European structural funds. Nevertheless, we aim to extend the research analysis over a much longer period of study, involving the 2021-2027 funding period, further identifying how economic and institutional indicators continue to influence the uptake rate and, at the same time, developing the database by adding new determinants to determine the future rate of absorption of European structural funds.

5 Conclusions

Our study aimed to identify the contextual association between the absorption of European funds, economic growth, and quality of governance. The discrepancies between countries regarding the absorption rate allowed us to identify both institutional and economic factors that can improve or worsen the degree of absorption at the level of the 27 member states of the European Union.

The premises of the study, more precisely the three hypotheses within the paper, were confirmed and verified through other research works, finally determining that both economic and institutional factors significantly influence the absorption rate. According to our results, the public policies require an improvement, along with the administrative capacity, strongly adapted to attract and use funds by proposing and implementing projects, as well as an economic environment that allows co-financing of each project at the state level, implicitly at the regional level.

The first hypothesis was confirmed, the growth coefficient of the gross domestic product for the previous year showing us that it leads to a significant increase in the rate of absorption of European funds for the current year at the level of each state, with a statistical probability of 1%.

The regression analysis results fully confirmed hypothesis number 2, with economic factors determining whether the absorption rate increases or decreases according to their nature. Although the relationship regarding inflation is inverse, European structural funds' absorption rate decreases because inflation directly valorizes the national currency, resulting in absorption with a reduced monetary value.

The last hypothesis of our research considered the significant link between institutional indicators and the absorption rate, this being partially confirmed within the corruption perception index, influencing the increase of the absorption rate under 1%. Government effectiveness, as the second half of this hypothesis, revealed a negative influence on the absorption rate, decreasing by 0.669% under conditions of a 1% increase in GE. In this sense, for the effectiveness of the government to contribute positively to the increase in the absorption rate of the European structural funds, it is necessary to prioritize the formation or even the reform of the institutional framework to have the necessary capacity to implement the proposed projects through the allocated funds. At the same time, it is necessary to create a regulatory framework designed to support the attraction of funds and, at the same time, to stimulate investments to increase the absorption rate.

Finally, the funds allocated for public administration reform should be a priority, especially in developing states. This represents one of the key factors that would lead to a high degree of structural fund absorption in Europe.

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References

- Achim, M.V. (2017). Corruption, income, and business development. Journal for International Business and Entrepreneurship Development, 10(1), pp. 85-100. https://doi.org/10.1504/JIBED.2017.082757.
- Achim, M.V. and Borlea, S. N. (2015). Determinants of the European Funds Absorption 2007-2013 in the European Union Member States. The 2015 WEI International Academic Conference Proceedings. The West East Institute. At https://www.fincrime.net/storage/app/uploads/public/60a/517/2bc/60a517 2bc3247577715807.pdf>, accessed 2 February 2024.
- Albulescu, C. T. and Goyeau, D. (2013). EU Funds Absorption Rate and The Economic Growth. Timisoara Journal of Economics and Business, 6(20), pp. 153-170.
- Atunes, M. et al. (2020). The Impact of Structural Funds on Regional Growth: A Panel Data Spatial Analysis. Intereconomics. Review of European Economic Policy, 55(2), pp. 312–319.
- Bachtler, J., Mendez, C., and Oraze, H. (2014). From Conditionality to Europeanization in Central and Eastern Europe: Administrative Performance and Capacity in Cohesion Policy. European Planning Studies, 22(4), pp. 735– 757. https://doi.org/10.1080/09654313.2013.772744.
- Bailey, D. and De Propis, L. (2004). A Bridge to Phare? EU Pre0accession Aid and Capacity-Building in the Candidate Countries. Journal of Common Market Studies, 42(3), pp. 77–98. https://doi.org/10.1111/j.0021-9886.2004.00477.x.
- Calinica, R. M. (2020). EU Regional Policy and the Absorption Rate of European Structural and Investment Funds in Romania. Economics and Applied Informatics, 2, pp. 189–193. https://doi.org/10.35219/eai15840409124.
- Cartwright, A. and Batory, A. (2012). Monitoring Committees in Cohesion Policy: Overseeing the Distribution of Structural Funds in Hungary and Slovakia. Journal of European Integration, 34(4), pp. 323–340. https://doi.org/10.1080 /07036337.2011.595486.
- Dellmuth, L. M. (2011). The Cash Divide: The Allocation of European Union Regional Grants. Journal of European Public Policy, 18(7), pp. 1016–1033. https://doi.org/10.1080/13501763.2011.599972.
- Dellmuth, L. M. and Stoffel F., M. (2012). Distributive Politics and Intergovernmental Transfers: The Local Allocation of European Union Structural Funds. European Union Politics, 13(3), pp. 413–433. https://doi. org/10.1177/1465116512440511.
- De Rosa, D., Gooroochurn, N., and Görg, H. (2016). Corruption and Productivity: Firm-level. Jahrbücher für Nationalökonomie und Statistik, 235(2). https:// doi.org/10.1515/jbnst-2015-0203.
- Dornean, A. (2016). Gestiunea fondurilor structurale europene. Bucharest: C.H. Beck Publishing House.
- European Commission. (2024a). Cohesion Open Data Platform. At https://cohe siondata.ec.europa.eu/>, accessed 24 February 2024.
- European Commission. (2024b). Latest business and consumer surveys. At https://economy-finance.ec.europa.eu/economic-forecast-and-surveys/ business-and-consumer-surveys/latest-business-and-consumer-surveys en>, accessed 24 February 2024.
- European Parliament. (2023). The impacts of recent inflation developments on the EU finances. Policy Department for Budgetary Affairs Directorate-General

- for Internal Policies PE 756.629 November 2023. At https://www.europarl. europa.eu/RegData/etudes/STUD/2023/756629/IPOL STU(2023)756629 EN.pdf>, accessed 22 February 2024.
- European Parliament. (2024). Absorption rates of Cohesion Policy funds. Policy Department for Structural and Cohesion Policies Directorate-General for Internal Policies. PE 747.284 – May 2024.
- Franco de, Lima, L. G. C. and Maciel-Lima, S. (2021). Direct Aid: International Cooperation Against Laundering of Assets and The Crimes that Precede it. Journal of Law and Sustainable Development, 9(1): e724. https://doi. org/10.37497/sdgs.v9i1.78.
- Grecu. E. (2009). European Funds Absorption A Possible Chance for Romania. Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture, 66(2), pp. 207–210, ref. 10. https://www. cabidigitallibrary.org/doi/full/10.5555/20103277970.
- Grusevaja, M. and Pusch, T. (2011). How does institutional setting affect the impact of EU structural funds on economic cohesion? New evidence from Central and Eastern Europe. IWH Discussion Papers, No. 17. Leibniz-Institut für Wirtschaftsforschung Halle (IWH), Halle (Saale). At https://nbn-re solving.de/urn:nbn:de:101:1-201112215420>, accessed 16 February 2024.
- Gundlach, E. and Paldam, M. (2009). The transition of corruption: From poverty to honesty. Economic Letters, 103(3), pp. 146–148. https://doi.org/10.1016/j. econlet.2009.03.002.
- Hapenciuc, C.V., Morosan, A.A., and Arionesei (Gaube), G. (2013). Absorption of Structural Funds - International Comparisons and Correlations. Procedia Economics and Finance, 6, pp. 259–272. https://doi.org/10.1016/S2212-5671 (13)00139-1.
- Încălțărău, C., Pascariu, G.C., and Surubaru, N.-C. (2020). Evaluating the Determinants of EU Funds Absorption across Old and New Member States – the Role of Administrative Capacity and Political Governance. Journal of Common Market Studies, 58(4), pp. 941–961. https://doi.org/10.1111/ icms.12995.
- Jureviciene, D. and Pileckaitė, J. (2013). The impact of EU structural fund support and problems of its absorption. Business, Management and Economics Engineering, 11(1), pp. 1–18. https://doi.org/10.3846/bme.2013.01.
- Kemmerling, A. and Bodenstein, T. (2006). Partisan Politics in Regional Redistribution: Do Parties Affect the Distribution of EU Structural Funds across Regions? European Union Politics, 7(3), pp. 373–392. https://doi. org/10.1177/1465116506066264.
- Kersan-Skabic, I. and Tijanic, L. (2017). Regional absorption capacity of EU funds. Economic Research-Ekonomska Istraživanja, 30(1), pp. 1191–1208. https:// doi.org/10.1080/1331677X.2017.1340174.
- Kirbis, M. (2009). The Importance of European Funds in Reducing Disparities in Development between European Regions and Creating an Optimal Model for Absorption of European Funds. Government Office for Local Self-Government and Regional Policy. At https://citeseerx.ist.psu.edu/docume nt?repid=rep1&type=pdf&doi=c60c61fb002400c93c759027ee3203a681ef4 0d5>, accessed 2 February 2024.
- Lucian, P. (2021). Absorption of European Funds by Romania during 2014-2020. Studies in Business and Economics, 16(2), pp. 157–170. https://doi. org/10.2478/sbe-2021-0031.

- Marinas, L. and Prioteasa, E. (2015). View of the Absorption Rate of the European Social Fund in Romania. Review of International Comparative Management, 16(3), pp. 354-371.
- Mauro, P. (1995). Corruption and growth. The Quarterly Journal of Economics, 110(3), pp. 681–712. https://doi.org/10.2307/2946696.
- Mihăilescu, G. (2012). Two Eastern European countries with different paths: Why Polish manage to efficiently absorb the European money while Romania remains with its funds blocked. Alliance for the Clean Romania. At https:// www.academia.edu/3354176/Poland vs Romania Two Eastern European Countries with diffrent paths>, accessed 3 March 2024.
- OECD (2020). Strengthening Governance of EU Funds under Cohesion Policy: Administrative Capacity Building Roadmaps, OECD Multi-level Governance Studies, OECD Publishing. At https://www.oecd.org/publications/strengthe ning-governance-of-eu-funds-under-cohesion-policy-9b71c8d8-en.htm>, accessed 12 November 2024.
- OECD (2023). The Principles of Public Administration. OECD Publishing. At https://www.sigmaweb.org/publications/Principles-of-Public-Administra tion-2023.pdf>; https://www.sigmaweb.org/publications/principles-public -administration.htm>, accessed 18 November 2024.
- Paldam, M. (2002). The cross-country pattern of corruption: economics, culture and the seesaw dynamics. European Journal of Political Economy, 18(2), pp. 215-240. https://doi.org/10.1016/S0176-2680(02)00078-2.
- Roman, F.A., Popescu, D. and Achim, M.V. (2023). The Impact of Fraud and Corruption on the Level of Absorption of EU Funds (2014-2020). Journal of Law and Sustainable Development, 11(2). https://doi.org/10.55908/sdgs.v11 i2.336
- Santos, M., Conte, A. and Molica, F. (2024). Financial Absorption of Cohesion Policy Funds: How Do Programmes and Territorial Characteristics Influence the Pace of Spending? Journal of Common Market Studies. https://doi. org/10.1111/jcms.13640.
- Sedeilmeier, U. (2008). After Conditionality: Post-Accession Compliance with EU Law in East Central Europe. Journal of European Public Policy, 15(6), pp. 806-825. https://doi.org/10.1080/13501760802196549
- Smeriglio, A. et al. (2015). Administrative Capacity-Building and EU Cohesion Policy, Paper 1: Literature Review, EPRC, Glasgow.
- Surubaru, N.C. (2020). European funds in Central and Eastern Europe: drivers of change or mere funding transfers? Evaluating the impact of European aid on national and local development in Bulgaria and Romania. European Politics and Society, 22(2), pp. 203–221. https://doi.org/10.1080/23745118.2020.17 29049.
- Tigănasu, R., Încaltărău C., and Pascariu G.C. (2018). Administrative capacity, structural funds absorption and development. Evidence from central and eastern European Countries. Romanian Journal of European Affairs, 18(1). At https://papers.ssrn.com/sol3/papers.cfm?abstract id=3296925>, accessed 12 November 2024.
- Tosun, J. (2013). Absorption of Regional Funds: A Comparative Analysis. Journal of Common Market Studies, 52(2), pp. 371–387. https://doi.org/10.1111/jcm s.12088.
- Transparency International. (2024). At https://www.transparency.org/en/, accessed 24 February 2024.

- Vukasina, M, Kersan-Skabic, I., and Orlic, E. (2022). Impact of European structural and investment funds absorption on the regional development in the EU-12 (new member states). Equilibrium. Quarterly Journal of Economics and Economic Policy, 17(4), pp. 857–880. https://doi.org/10.24136/eq.2022.029.
- Zaman, G. and Georgescu, G. (2009). Structural Fund Absorption: A New Challenge for Romania? Journal for Economic Forecasting, 6(1), pp. 136–154.
- World Bank. (2024). Open Data. At https://data.worldbank.org/, accessed 24 February 2024.