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IMPACT OF POLITICAL AND FISCAL DECENTRALIZATION ON THE GOVERNMENT QUALITY IN CENTRAL AND EASTERN EUROPEAN COUNTRIES¹

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Abstract

Since the 1970s, the process of decentralization has spread throughout the world, and today more than 95% of democratic countries are decentralized. Decentralization should lead to a well-organized and more efficient local government. Nevertheless, the empirical results are rather vague. The motivation for this paper is to examine the impact of political and fiscal decentralization on the quality of government in seventeen countries in Central and Eastern Europe for the period 1998 - 2012. The main objective of the paper is to explore whether fiscal decentralization positively influences the quality of government and whether political decentralization reduces its positive influence. An additional contribution of the paper comes from the introduction of a decentralization

¹ This paper has emerged from master thesis of Maja Herman, under the mentorship of Josip Viskovic, PhD.

interaction variable. Our results have shown that fiscal decentralization has a positive impact on governance, while political decentralization was found to be statistically insignificant. Our results also showed that richer countries have higher government quality, that government size increases the level of corruption and decreases government quality, and that in more democratic countries politicians behave more responsibly and accountably, which decreases the level of corruption and increases government quality. We conclude that political decentralization cancels out the positive effects of fiscal decentralization on the quality of government, which can be explained by less developed institutions at the local level in Central and Eastern European countries.

Keywords: *fiscal decentralization, political decentralization, government quality, CEE countries*

1. INTRODUCTION

Decentralization refers to the transfer of authority and responsibilities for the delivery of public services from the central to the local level. Indeed, lower levels of government play an increasingly important role in the development of the country (Krtalic and Gasparini, 2007). Decentralization can also be defined as a tool to achieve greater efficiency and competitiveness at both regional and national levels. According to Schneider (2003), devolution of powers and resources to lower levels of government increases economic efficiency. In relation, the process of decentralization has covered more than 95% of democratic countries since the 1970s (Rodriguez-Pose and Ezcurra, 2010).

Decentralization includes fiscal, administrative and political dimensions (Schneider, 2003). Fiscal decentralization refers to the degree of fiscal cession to non-central government entities, that is, it defines the ability of local governments to have local revenues and income transferred from the central government with some discretionary spending. Administrative decentralization refers to the degree of autonomy that decentralized units of government have relative to central control, i.e., it involves the redistribution of responsibility, authority, and sources of funding across different levels of government. Political decentralization refers to the degree of governance carried out by decentralized government units, i.e. it denotes the power that citizens and elected representatives have in the decision-making process (Schneider, 2003; Krtalic and Gasparini, 2007). Nevertheless, views on the impact of fiscal and political decentralization on the quality of government are unclear and there are arguments both for and against decentralization.

CEE countries had various institutional characteristics before the 1990s - planned economy, low operational efficiency, high level of corruption, low level of democracy and protection of human rights. Therefore, fundamental reforms of political and economic institutions were necessary, i.e. transition from socialism to democracy and market economy. This included the transition of the economy

from a centrally controlled economy with state-owned enterprises to a market economy based on private enterprises and private ownership. In addition, the transition also included political changes including political freedom. These countries were in a situation of adjustment and balance between the high role of government and the efficient transition to a market economy. This meant stabilizing the economy, liberalizing the conditions for doing business, privatizing enterprises, and changing the institutional environment. Since effective government institutions are important for economic growth and development, institutional transition was also necessary: Entrepreneurship development, protection of property rights, effectiveness of market mechanisms, etc. However, many of them failed to do so. Indeed, Szarzec et al. (2014) point out that a common problem of all transition countries is the low quality of regulation, the almost non-existent rule of law and the lack of control over corruption. These low scores could be the legacy of the former socialist system, but also show the ineffectiveness or unwillingness of decision makers to adopt and execute the right laws. Finally, Szarzec et al (2014), comparing transition countries, concluded that those countries where effective state institutions have not been developed tend to experience social destabilization and subsequently slow economic growth. This implies the need for further research on the determinants of good governance as a prerequisite for economic growth. With regard to decentralization in these countries, Rodriguez-Pose and Krojjer (2009) describe it as only partially successful due to macroeconomic instability, poor quality of institutions, and an incomplete and insufficiently transparent process of decentralization considering the asymmetry between responsibilities and resources.

Recently, however, there has been a growing number of research papers examining fiscal and political decentralization and the quality of government. Most studies have focused on fiscal decentralization and the results show that it improves quality. Regarding the relationship between political decentralization and government quality, there is a lack of empirical work and the results of a few are not unanimous. Moreover, these two aspects of decentralization are interrelated. Indeed, political decentralization must be followed by fiscal decentralization, i.e. local government funding should be on a sound fiscal footing and consistent with local government functions. Therefore, it is also important to examine the joint effect of these two aspects of decentralization on the quality of government. Moreover, transition countries have been neglected in empirical research, and this paper fills this gap, so the contribution of this paper lies in the scarcity of research regarding the above relationship, which has not been explored enough empirically.

After the introduction section where the aim and problem of the research were introduced, the paper includes a literature review section where the relationship between decentralization and quality of government is examined and presented. The third section explains the research methodology while the main empirical findings are presented in section four. The final section is the conclusion, which summarizes the relevant findings with accompanying recommendations.

2. LITERATURE REVIEW

In the post Bretton Wood Conference period of 1994, it was felt that the plans and programs of the central government were the most important thing for the development of a country. However, this approach did not prove to be correct because, in addition to the lack of sustainable economic growth in many developing countries, reduced public freedom, increasing corruption and low level of quality of public services and increase in poverty denoted the period of strong expansion of central government (Ebel and Yilmaz, 2002). Therefore, in the last two decades, many international organizations and the governments of many countries have advocated a greater role for lower levels of government in achieving development goals. It has been believed that by devolving greater powers and responsibilities to local authorities, these goals can be achieved, devolving greater powers to lower levels of government will lead to public policies that are closer to the people, more efficient allocation of resources, and ultimately greater economic growth (Ebel and Yilmaz, 2002). However, to achieve these goals, local governments must also be well organized, which means that political decentralization must be followed by appropriate fiscal decentralization.

Korotun et al. (2020) assessed the impact of fiscal decentralization on GDP per capita growth for 13 countries in Central and Eastern Europe. The authors found that revenue decentralization and tax autonomy had a negative impact on economic growth. But expenditure decentralization was associated with a positive GDP growth rate. Moreover, structural transformations radically reduced the size of the public sector in Central and Eastern Europe, which had a positive impact on the economy. The main components of local budget tax revenues are income tax and property tax.

Stojčić and Šuman Tolić (2019) examined the impact of fiscal decentralization on economic growth, taking into account the multidimensional nature of the transmission channels between the two. The analysis is applied to the dataset of 24 Western and Central and Eastern Europe countries covering the years 2005 - 2012. Their results support both direct and indirect effects of decentralization on economic growth. The results are particularly interesting with respect to vertical fiscal imbalances and the size of the government sector. The former suggests that countries where local governments rely more on their own revenues rather than transfers from the central level are more prosperous. The latter result contradicts the Leviathan hypothesis and suggests that increasing the size of the government sector promotes economic growth.

Jurlina Alibegović et al. (2018) in their study examined the extent to which Croatian large cities control their tax revenues and specify the ability of these authorities to introduce taxes and generate revenues independently. The results of their analysis show that cities do not sufficiently use the available fiscal instruments to plan and realize budget revenues. Bajo and Bronić (2004) have also shown that the so-called fiscal equalization system in Croatia, which is based

on revenue sharing between the state and local units and grants from the central government to local units, is not effective. The problem is that the mechanism of fiscal equalization is not based on a good assessment of fiscal inequalities and on the established fiscal position of local units, which would take into account reliable calculations of fiscal capacities. The poorly regulated mechanism of inter-budgetary transfers, especially the lack of criteria for the transfer of grants, has slowed down the implementation of fiscal decentralization, and the use of funds received through decentralization is inefficient. The reasons for this situation should be sought at the level of central government, but also at the level of local units.

However, there can also be negative effects of decentralization. Decentralization can lead to coordination problems that may ultimately delay or prevent reforms (the problem of vetoing the adoption of measures). A "race to the bottom" can also be observed, leading to lower local tax rates and local revenues that may not be necessary to finance public goods. As a result, the quality of government deteriorates (Dreher, 2006), suggesting that the benefits of decentralization may have been overestimated. Given the arguments for and against decentralization, it is necessary to look at the empirical results to understand the relationship between fiscal and political decentralization and government quality, but first general features about decentralization in central and Eastern European (CEE) countries are given.

2.1. Fiscal decentralization and government quality

Bird and Wallich (1993) define fiscal decentralization as part of a package of reforms aimed at improving the efficiency of the public sector, increasing competition among subnational governments in the provision of public services and goods, and promoting economic growth. Fiscal decentralization, according to Thiessen (2003), means giving government bodies below the central level the power to collect tax revenues and make independent decisions on expenditures.

Studies on fiscal decentralization have mostly examined its impact on regional inequalities or economic growth, while the relationship with quality of government is usually analysed through the level of corruption and other aspects of quality of government are neglected. Nevertheless, a positive relationship between fiscal decentralization and government quality has been confirmed.

Huther and Shah (1998) examined the relationship between fiscal decentralization and government quality using OLS regression for 80 countries at different stages of economic development. The work also aimed to fill the gap in measuring governance quality by constructing an index. The research results show that fiscal decentralization improves governance quality as measured by governance index. The research findings are consistent with the theoretical literature on fiscal federalism, which considers an increase in public sector responsibility. However, this study is biased due to omitted variables. Namely,

data on subnational expenditures were only available for forty of the eighty countries in the sample, and data on the governance quality index did not cover all countries, and missing data were filled in with estimates.

De Mello and Barenstein (2001) conducted their analysis in 78 developed and developing countries for the period 1980 - 1998. Their results showed that fiscal decentralization is related to various indicators of governance. They controlled for the influence of GDP per capita and population size and proved that decentralization of expenditure functions to the subnational level can improve governance. Moreover, their results showed that the source of subnational expenditure matters, i.e. the higher the proportion of grants and transfers and non-tax revenues, the stronger the relationship between decentralization and governance. They also showed that where subnational governments are large, further decentralization of the tax base can lead to allocative inefficiency and poor governance.

Dreher's (2006) results, based on cross-sectional data for a maximum of 129 countries and panel analyses for 70 countries from 1984 to 2001, have shown that decentralization improves governance to some extent. The results apply mainly to low-income countries, but to some extent also to high-income countries. However, while on the one hand decentralization improves governance, on the other hand it prevents reforms under certain conditions and consequently deteriorates governance and institutional quality. Moreover, the authors concluded that the number of subnational levels of government has a negative impact on governance. Finally, revenue decentralization reduces the cost of setting up businesses and has a positive impact on compliance with the rule of law, but these effects are diminished as countries become wealthier. The author controlled for GDP per capita, country population, and civil liberties.

In line with previous research are the findings of Kyriacou and Roca-Sagales (2009). They also show the positive relationship between fiscal decentralization and the quality of government. The study covered 29 countries between 1984 and 1997. The indicator of government quality used in this paper represents an average of three dimensions: Corruption, Rule of Law, and Bureaucratic Quality, taken from the ICRG database.

Kyriacou and Roca-Sagales (2011) conducted another empirical study. They applied a cross-sectional analysis with 101 countries and an unbalanced panel data analysis with 58 countries in the sample for the period from 1998 to 2006. Compared to the previous study, an additional dimension was added to the indicator of government quality, namely government effectiveness. Data were taken from the World Bank's Worldwide Government Indicators database (WGI), while data on fiscal decentralization were taken from the IMF's Government Finance Statistics database (GFS). The results are consistent with most of the empirical literature and show that fiscal decentralization improves governance.

2.2. Political decentralization and government quality

While most theoretical and empirical research confirms that fiscal decentralisation improves the quality of government, the results on the effects of political decentralisation are ambiguous. For example, on the one hand, political decentralisation may improve the quality of government because subnational governments are better informed and voters are able to punish local politicians for unacceptable behaviour at the next election. On the other hand, political decentralisation may also reduce quality because it is difficult for citizens to assess responsibility for activities among multiple levels of government (Kyriacou and Roca-Sagales, 2011) and, in addition, corruption may be more likely in local communities because of the familiarity and closer relationships between interest groups and those in power. There is also a problem in measuring political decentralisation as many different indicators are used, making it difficult to compare results.

Fisman and Gatti (2002) introduced federalism as a variable when examining the relationship between political decentralisation and corruption. Federalism was a dummy variable indicating the presence of a federal structure in a country. The authors concluded that there was no statistically significant relationship between federalism and corruption. Similarly, Treisman et al. (2000) found no relationship between decentralisation of decision making and corruption, i.e. that federal states are more corrupt. Moreover, the authors found that parallel political and fiscal decentralisation has an impact on the quality of governance.

Enikolopov and Zhuravskaya (2007) examined the extent to which the effect of fiscal decentralisation on governance and economic growth depends on the characteristics of political institutions. They analysed data for 95 countries from 1975 to 2000. The results show that fiscal decentralisation combined with strong national parties significantly increases the quality of government, i.e., government efficiency, regulatory quality, control of corruption, and rule of law, and improves the provision of health and education services. They have also found evidence that subordination of local governments to higher-level governments in developed and developing countries increases the effect of decentralisation on growth and the provision of public goods, and in developing countries on the quality of government. The measure of fiscal decentralisation used was the share of subnational revenues and expenditures in total government expenditures and revenues from the IMF GFS. Measures of political decentralisation were taken from the DPI database. The World Bank indices and the corruption index from Transparency International were used as measures of government quality.

Fan et al. (2009), in their cross-country dataset based on information from more than 480 sources and the results of a firm-level survey (interviewed business managers) conducted by the World Bank team in 80 countries in 1999 and 2000 on specific firm experiences with bribery, concluded that neither

federalism, nor electoral decentralisation, nor decentralisation of decision making have a statistically significant impact on corruption. They also found that fiscal decentralisation lowers the level of corruption, while a greater number of levels of government increase it, due to the blurring of accountability. Finally, their findings pointed to the potential problem of uncoordinated rent-seeking that occurs when government structures become more complex.

Kyriacou and Roca-Sagales (2009) included in their study the effect of the interaction between fiscal decentralisation and decentralisation in elections and decision making. They find that these types of political decentralisation reduce the positive effects of fiscal decentralisation on institutional quality in low- and middle-income countries, while the same forms of decentralisation increase the positive effects of fiscal decentralisation in rich countries. The authors concluded that this may be because political institutions at the subnational level in poorer countries are underdeveloped and unable to harness the positive effects of decentralisation through elections. Consequently, they have concluded that the marginal benefits of decentralisation in terms of quality of government diminish as GDP per capita increases.

In their subsequent study, Kyriacou and Roca-Sagales (2011) confirmed that political decentralisation weakens the positive impact of fiscal decentralisation on government quality. They explained that this could be due to the fact that local officials tend to be captured by local interests, considering that they are endowed with fiscal revenues and are subject to elections. Therefore, a positive effect of fiscal decentralisation on the quality of government is achieved only if fiscal decentralisation is not accompanied by political decentralisation, which implies coordination problems or corrupt behaviour by local incumbents.

3. DATA AND METHODOLOGY

The above research problem is investigated using multiple linear regression, with the sample covering the period from 1998 to 2012 due to data availability. Namely, the data for the variable autonomy, which denotes political decentralization, is only available up to 2012. The analysis includes 17 CEE countries: Albania, Azerbaijan, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia and Ukraine. The research is conducted using the statistical program SPSS.

The research follows the approach of Kyriacou and Roca-Sagales (2011). Therefore, fiscal decentralization is measured by the shares of tax and revenue decentralization and the data are obtained from the IMF database (2018). Although it could be criticized that these data do not reflect the multidimensionality of decentralization and do not provide information on the source of subnational revenues, they are the most commonly used measure of fiscal decentralization and are available for the countries in the sample.

Alternative data on fiscal decentralization, such as transfer dependence and vertical fiscal imbalances or allocation of expenditures by economic and functional classification, are not available for all countries in the sample.

Political decentralization is measured in different ways depending on the study sample and period. In this study, it is considered as decision-making decentralization, and the dummy variable *Autonomy* from the World Bank Database of Political Institutions (2018) is used as its indicator. As explained earlier, data for this variable is only available up to 2012.

There are many indicators that reflect the quality of government, and the most important ones are corruption control, rule of law, government effectiveness or protection of property rights (Charron et al, 2015). Therefore, these indicators are used as indicators of government quality and are available from the World Bank Governance Indicators (WBI) prepared by Kaufman et al. (2006). These indicators combine the views of a wide range of stakeholders, i.e. citizens, businesses and expert surveys. The data are based on over 30 data sources obtained through surveys of representative individuals. The WBI are considered the most accurate and reliable measures of government quality used in previous academic research. The indicator represents weighted averages of the underlying data.

As in previous studies, appropriate control variables are included in the model. This is done to avoid the problem of bias due to omitted variables, which can significantly alter the research results. Based on the paper by Kyriacou and Roca-Sagales (2009 and 2011) and the paper by Triesman (2000), the model includes four control variables: GDP per capita (log value), trade openness, government size, and voice and accountability index. Kyriacou and Roca-Sagales (2009) believe that the influence of GDP per capita should be taken into account because richer countries have higher quality of government and higher quality promotes economic development, which is explained by the positive effect of income on education and literacy. Government size is expected to increase the level of corruption, but on the other hand, it could have a positive effect on the rule of law and the quality of regulation. The size of government is measured as the share of government in real GDP, and the data are from the Penn World Tables database (2018). Trade openness is also included in the model as suggested by Fisman and Gatti (2002). It is measured as exports and imports of goods and services as a share of GDP and small states are assumed to be more open to foreign trade and capital flows. In addition, smaller states should have more effective and honest governments as a larger proportion of the population needs to be involved in the established incumbent network, making it less attractive and cost effective (Triesman, 2000). Finally, the voice and accountability index is adopted from the WGI index group and used as an indicator of democracy. Namely, politicians in more democratic countries are expected to behave in a more responsible and accountable manner and reduce the level of corruption (Kyriacou and Roca-Sagales, 2009). Democracy is also associated with higher levels of decentralization.

Table 1 shows summary statistics of the variables. As can be seen from Table 1, the number of observations for some variables is not 255, which means that the database is unbalanced. Regarding the key variables, we can observe that the maximum level of tax and revenue share is 47.6% (Belarus in 2003), the minimum is 0.013% (Estonia in 2007), while the average is 0.23%. Political decentralization is a dummy variable, so the maximum value is 1 and the minimum value is 0. The descriptive statistics are also given for the control variables and it can be found that the mean value of GDP per capita is 9355.73 USD, trade openness is 101.83% of GDP, government size is 25% of GDP and voice and accountability is 0.32.

Table 1

Summary statistics

	Mean	Max	Min	N	SD	Median
Fiscal decentralization	0,23	0,476	0,013	209	0,112	0,158
Political decentralization	0,15	1	0	255	0,424	0
GDP per capita	9355,73	25430,34	1413,89	255	5725,50	8918,49
Openness	101,83	176,33	47,15	255	30,88	99,01
Government size	25	43	7	240	4,9	24,95
Voice and accountability	0,32	1,2	-1,77	223	0,8136	0,57

Source: Authors calculation

4. EMPIRICAL RESULTS AND DISCUSSION

As noted earlier, multiple linear regression is used to examine the impact of fiscal and political decentralization on the quality of government. Formally, the model for the multiple linear regression is $y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_p x_{ip} + e_i$ for $i = 1, 2, \dots, n$, where i is country, X_{it} is the vector of control variables, and e_{it} is the error term.

Regarding the choice of method, which allows us to determine how the independent variables enter the analysis, we apply the ENTER method. This means that all variables are entered in a block in a single step i.e. simultaneously. The correlation between the variables was tested by Pearson correlation coefficient. The obtained correlation matrix is available on request. The significance of the regression model is tested by the F-test, testing the following hypotheses:

$$H_0: \beta_0 = \beta_1 = \beta_2 = \dots = \beta_k = 0$$

$$H_1: \beta_j \neq 0, \quad j=1, 2, 3, \dots, k$$

A null hypothesis is accepted if no coefficient of the independent variables specified in the model is statistically significant. If the test shows that at

least one of the above variables is statistically significant, the null hypothesis is rejected and the alternative hypothesis H1 is accepted.

As it can be seen from Table 2, where the summed indicators are estimated for the whole model, the value of the coefficient of determination (R-squared) is 0.968, which means that the regression model explains 96.8% of the variability of the response data around its mean, which means that the model fits the given data. Looking at the adjusted R-squared to show the goodness of fit of the regression model in terms of degrees of freedom, we can see that 96.5% of the variability of the response data is around its mean.

Table 2

Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,984	,968	,965	,1403336	,968	315,505	6	63	,000

Source: Authors calculation

Table 3 shows the results of the analysis of variance. Table ANOVA shows whether our model is statistically significant. As we can see, the significance value is 0.000, which is less than 0.01, it can be confirmed that our model is statistically significant.

Table 3

Analysis of Variance - ANOVA table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37,280	6	6,213	315,505	,000
	Residual	1,241	63	,020		
	Total	38,521	69			

Source: Authors calculation

The final model that we estimate in this research has the following equation: $GQ_i = \beta_0 + \beta_1FD + \beta_2PD + \beta_3GDP_{p/c} + \beta_4OP + \beta_5GS + \beta_6VA + e_i$, where *i* is country, GQ government quality, FD fiscal decentralization, PD political decentralization, GDP_{p/c} gross domestic product *per capita*, OP trade openness, GS government size, VA voice and accountability and *e_{it}* is the error term.

Table 4 shows estimates of the multiple linear regression model. The table shows standardized coefficients β for each variable used in the model, as well as their significance and partial correlation coefficients. From the table, a positive and statistically significant (p = 0.002) effect of fiscal decentralization on the quality of government is evident. This result is consistent with previous empirical work and the theorem of "fiscal decentralization", i.e. local

governments are more able to meet local public needs of citizens than the central government. The parameter β_1 has a value of 0.15, which means that the quality of government increases by 0.15 when the share of subnational revenue in total government revenue increases by one unit.

Regarding political decentralization, the results indicate that although the β_2 coefficient is negative (-0.033), which would mean that when political decentralization increases by one unit, the quality of government decreases by 0.033, political decentralization proved not to be statistically significant ($p = 0.311$), which is also consistent with some previous works that leave a vague relationship of the variables analysed, indicating the need to rethink the system of political decentralization in CEE countries, the need to better monitor local authorities. Indeed, if local politicians behave corruptly, it is questionable whether they provide local public goods and services efficiently, as the theory assumes.

Table 4

Regression results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
(Constant)	-1,131	,507		-2,229	,029					
Fiscal decentralization	,011	,003	,150	3,227	,002	-,617	,377	,073	,236	4,245
Political decentralization	-,062	,061	-,033	-1,021	,311	,301	-,128	-,023	,504	1,982
GDP per capita	,271	,113	,116	2,395	,020	,691	,289	,054	,217	4,607
Openness	,002	,001	,053	1,466	,148	,122	,182	,033	,388	2,575
Government size	-1,578	,716	-,076	-2,204	,031	,187	-,267	-,050	,432	2,317
Voice and accountability	,805	,041	1,037	19,472	,000	,962	,926	,440	,180	5,547

Note: Dependent Variable: government quality

Source: Authors calculation

Regarding the control variables, the results imply the significance of the GDP per capita ($p = 0.020$), government size ($p = 0.031$) and voice and accountability ($p = 0.000$) variables, while the trade openness variable was found to be statistically insignificant ($p = 0.148$). The GDP per capita coefficient β_3 was found to be statistically significant at a value of 0.116, implying that the quality of government increases by 0.116 units when GDP per capita increases by one unit. This is consistent with previous research, implying that richer countries have higher quality of government. In addition, government size has a statistically negative impact of -0.076 units on government quality, which confirms that government size increases the level of corruption, i.e. decreases government quality. Finally, government quality increases by 1.037 units when voice and accountability increase by one unit, confirming that politicians in more

democratic countries behave more responsibly and accountably, which reduces the level of corruption, i.e., increases government quality, which is consistent with previous research.

Due to the fact that multiple independent variables are used in the multiple regression analysis, there might be a problem of multicollinearity that can negatively affect our regression results. To test for multicollinearity, we observe the value of VIF (Variance Inflation Factor), which estimates how much the variance of a regression coefficient is inflated due to multicollinearity in the model. Indeed, the more the VIF value increases the less reliable our regression results become. However, the coefficients for all variables except voice and accountability (5.547) are less than 5, which implies moderate correlation, but all coefficients are less than 10, which means there is no reason for concern, i.e., the multicollinearity problem does not exist in this case.

Regarding the ambiguous results of the effect of decentralization, based on the previous research of Kyriacou and Roca-Sagales (2011), we further investigate the effect of the decentralization interaction variable on governance. Namely, we test whether political decentralization undermines the positive effects of fiscal decentralization, as demonstrated in previous research. Table 5 shows the results of the analysis of variance after introducing the interaction effect and it can be seen that the model is statistically significant at all significance levels.

Table 5

Analysis of Variance - ANOVA table – interaction effect of fiscal and political decentralization

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37,280	5	7,456	384,497	,000
	Residual	1,241	64	,019		
	Total	38,521	69			

Source: Authors calculation

As can be seen from Table 6, the interaction variable is statistically significant at all significance levels ($p = 0.001$). Moreover, the standardized coefficient β_1 is -0.147 , which implies that a one-unit increase in the interaction variable between fiscal and political decentralization decreases the quality of governments by 0.147 , *ceteris paribus*.

Table 6

Regression results – interaction of fiscal and political decentralization

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	-.941	,484		-1,945	,056					
Fiscal X political decentralization	-.060	,018	-.147	-3,407	,001	,667	-,392	-,076	,269	3,711
GDP per capita	,297	,105	,127	2,835	,006	,691	,334	,064	,249	4,011
Openness	,002	,001	,055	1,676	,099	,122	,205	,038	,475	2,106
Government size	-1,512	,707	-,073	-2,138	,036	,187	-,258	-,048	,436	2,295
Voice and accountability	,795	,039	1,024	20,454	,000	,962	,931	,459	,201	4,976

Note: Dependent Variable: government quality

Source: Authors calculation

This result suggests that political decentralization attenuates the positive impact of fiscal decentralization on government quality which implies the need to review and improve the control over the use of local revenues by incumbent local authorities, i.e., it implies that local revenues are not allocated efficiently due to administrative reasons or corruptive behaviour.

Finally, the inclusion of the interaction variable does not affect the significance of the other control variables, which means that GDP per capita and voice and accountability still have a significant positive impact on government quality, while government size affects it negatively. Regarding the problem of multicollinearity in our regression results, it can be observed that the VIF coefficients for all variables are less than 5, which means that there is no reason for concern about the reliability of our results.

5. CONCLUSION

Decentralization symbolizes a strengthening of the role of lower levels of government by providing them with more resources, greater autonomy, and the right to manage those resources. Over the years, decentralization has become an economic tool used to achieve various economic and political goals. Decentralization brings benefits to local citizens by increasing competition among lower levels of government and bringing government closer to citizens, resulting in higher levels of local democracy and political accountability. In some cases, however, decentralization can also be negative, as it creates coordination problems and consequently creates obstacles to the implementation of reforms. Moreover, competition may imply a "race to the bottom" that degrades the quality of government by driving down local tax rates. While richer countries increase

the efficiency of the public sector, the effects of decentralization in transition countries are vague and not clear enough. Therefore, this paper attempted to examine the extent to which decentralization really solves the problem of inefficient quality of government in transition countries.

Therefore, the effects of fiscal and political decentralization on the quality of government in seventeen CEE countries from 1998 to 2012 were examined. The results have shown that fiscal decentralization positively affects the quality of government, which is consistent with most previous empirical work and literature confirming the "fiscal decentralization" theorem. The relationship between political decentralization and government quality was found to be statistically insignificant, implying the need to reconsider the system of political decentralization in CEE countries in the context of better monitoring of local politicians. Finally, we tested the interaction effect of both decentralizations and our results suggest that political decentralization undermines the positive effects of fiscal decentralization. It can be concluded that fiscal decentralization positively affects the quality of government only when it is not associated with political decentralization. The negative effects of political decentralization in these countries can be explained by less developed political institutions at the local levels, the lack of political responsibility and accountability in these countries. Incumbent in power behave corruptively because corruption is more likely in local communities due to familiarity and closer relationships between interest groups and incumbent in power. Finally, our results have also shown that richer countries have higher quality of government, that the size of government increases the level of corruption and decreases the quality of government and that in more democratic countries politicians behave more responsibly and accountably, which decreases the level of corruption, and increases the quality of government.

The main limitation of our work relates to data availability, which may call into question the probative value of our results. Even though there are several indicators of fiscal decentralization, we used only one because the data for the selected sample is only available for this one indicator. In conclusion, the impact of decentralization on government quality depends on a number of factors that are sometimes difficult to capture in a single statistical model, which opens a wide field for further research on this topic. The development of new benchmarks that better reflect the multidimensionality of decentralization and government quality is another aspect that needs to be developed in the future.

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UTJECAJ POLITIČKE I FISKALNE DECENTRALIZACIJE NA KVALITETU VLADE U ZEMLJAMA SREDNJE I ISTOČNE EUROPE

Sažetak

Još od sedamdesetih godina prošloga stoljeća, proces decentralizacije proširio se diljem svijeta. Danas više od 95 % demokratskih zemalja decentralizirano. Decentralizacija bi trebala osigurati dobro organiziranu i učinkovitu lokalnu vlast. Međutim, rezultati dosadašnjih istraživanja nisu u potpunosti jasni. Motivacija autora ovoga rada je ispitati utjecaj političke i fiskalne decentralizacije na kvalitetu vlade u sedamnaest zemalja u srednjoj i istočnoj Europi u razdoblju od 1998. do 2012. godine. Glavni cilj rada je ispitati ima li fiskalna decentralizacija pozitivan utjecaj na kvalitetu vlade i smanjuje li politička decentralizacija ovaj pozitivan utjecaj. Dodatni doprinos rada je uvođenje varijable decentralizacijske interakcije. Rezultati ovoga istraživanja pokazuju da fiskalna decentralizacija ima pozitivan utjecaj na upravljanje, dok za političku decentralizaciju nema statistički značajnih rezultata. Rezultati su također pokazali da bogatije zemlje imaju kvalitetnije vlade, a u zemljama u kojima je veća demokracija političari se ponašaju odgovornije, uslijed čega je stopa korupcije manja, a kvaliteta vlade veća. Može se zaključiti da politička decentralizacija poništava pozitivne učinke fiskalne decentralizacije na kvalitetu vlade, što se može objasniti slabije razvijenim institucijama na lokalnoj razini u zemljama srednje i istočne Europe.

Ključne riječi: fiskalna decentralizacija, politička decentralizacija, kvaliteta vlade, zemlje srednje i istočne Europe.

JEL klasifikacija: H11, H70, H71.