Effects of Fiscal Decentralization on Local Public Investments

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Abstract: - A significant part of the literature on fiscal decentralization confirms that the greater the ability of decentralized governments to adapt policies to local preferences and to be innovative in providing public services, the greater the potential for investments and economic growth. This paper examines the dynamic effects and relationship between own source revenues, unconditional transfers, and local public investments. Over the past decades, fiscal and financial decentralization in Albania has made steady progress. However, the increasing responsibilities of local governments have intensified the need to raise the share of local revenues and expenditures relative to GDP and increase revenue from unconditional transfers. Following the administrative-territorial reform, fiscal decentralization has dynamically evolved, boosting local public revenues and granting greater discretion in their use to meet community needs. The specific law on local self-government finances led to increases in both own revenue and revenue from unconditional transfers. Further reforms have improved local public finance management, including local budgeting reforms, enhanced transparency of tax collection and expenditure, and self-assessment and monitoring of local government's financial status. These modernization efforts related to local finances have yielded positive results regarding macroeconomic stability, fund predictability, and transparent use of public funds. Consequently, central and local governments prioritize public investments in infrastructure and sector revitalization in their budgets. Local public investments have risen annually, driven by increased local income from taxes and government transfers. This growth reflects the focus of local and central development policies on addressing infrastructure and logistical challenges. The consolidation of decentralization and stable central budget transfers have created favorable conditions for local governments to implement new policies enhancing service quality and public investment performance.

Key-Words: - Local Government, Fiscal Decentralization, Local Public Investments, Own Revenue, Unconditional Transfer, Conditional Transfer.

JEL Classification System: H70, H71, H72, H73, H76, H77

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1 Introduction

The fiscal decentralization of local government in Albania has aimed to transfer the authority and responsibility of setting the base and level of local taxes and fees to the local government. It has also aimed at increasing the income for the local government both from its source revenues and from the unconditional transfer. These have been and continue to be the main sources of income for local government, for which the councils of local self-government units have full discretion to decide where to spend this income. An important moment of the impact of local government is related to investments in local functionalities. There is a strong correlation between the impact of local government investments and the decentralization of the competencies to decide how to spend their budget expenditures.

The study of public local investments, particularly concerning own source revenues and general and specific transfers, is crucial for several reasons. It helps to understand revenue sources and their impact by analyzing how local governments utilize internally generated funds through taxes, fees, and other sources, thereby revealing the link between local financial resources and investment outcomes, [1]. It is important to examine how general transfers (unconditional grants) and specific transfers (allocated for particular projects) from higher levels of government influence local investment decisions and project implementation. This analysis is essential for understanding the management and utilization of financial resources, contributing to informed decision-making, planning, and policy development at the local level.

Increasing revenues from the self-government units' resources is the main objective of public financial management at the local level and one of the important pillars of fiscal decentralization. However, local self-government units benefit from revenues in the form of transfers from the central government, in addition to revenues from their sources, where the general unconditional transfer has the most important and relatively significant weight, [2].

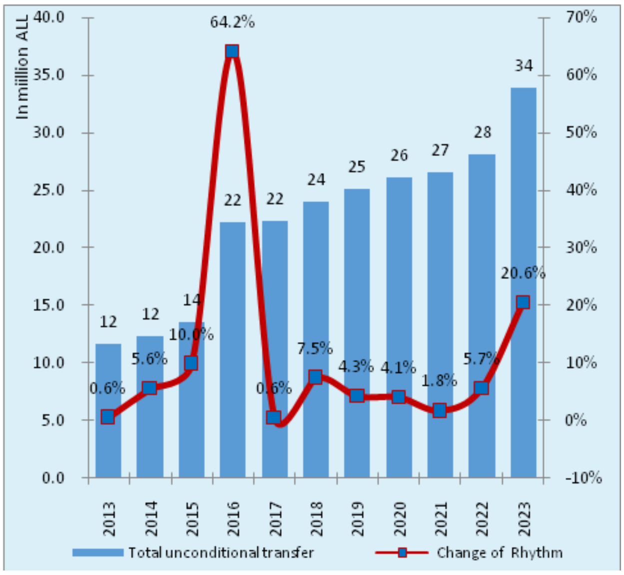

Fig. 1: Total unconditional transfer and rate of change in years
Source: [3]

The general unconditional transfer is a constant and stable source for the local government over the years, which after 2017 (the year in which the local self-government finance law was approved) is not less than 1 percent of the gross domestic product (GDP), [4]. The Figure 1 shows a significant increase in 2016. This happened after the adoption of the territorial administrative reform where a significant package of functions was decentralized to the local government. Figure 1 shows the trend of the change of the general unconditional transfer from 2013 to 2023.

Local government revenues have maintained over the years a significant growth trend, thus determining the positive performance of the local government's ability to obtain revenues, as well as presenting a confirmation of the positive effects of decentralization, despite the challenges of the last years that the country has faced, in general. From 2015, and beyond, except 2020 (and this was mainly caused by the pandemic), as is showed in Figure 2 local government tax revenues have maintained a positive trend, thus proving in this way that the role of local government regarding the fiscal potential to provide services has increased significantly.

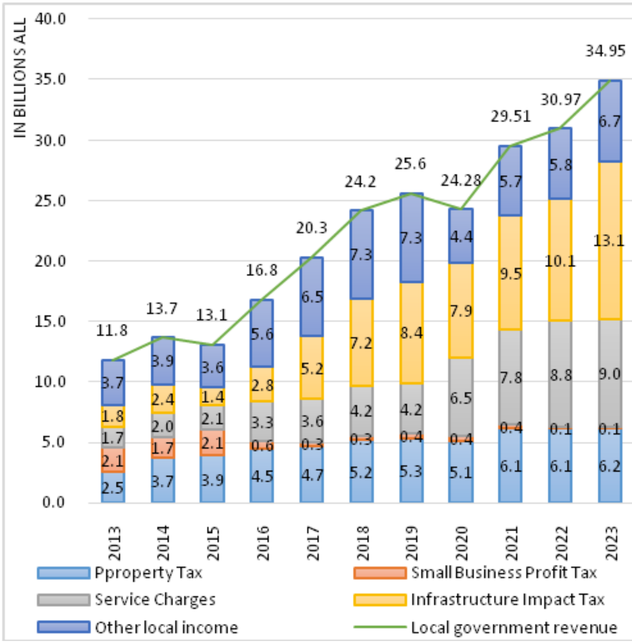

Fig. 2: Local government's revenues by source, in years
Source: [3]

At the same time, the increase in local government revenues has led, in recent years, to the change and growth of their ratio against total public revenues and gross domestic product.

Additionally, the local government has increased its role over the years through its contribution to the economy and the Gross Domestic Product, changing the ratio from 0.82% of GDP in 2015 to 1.37% of GDP in 2023. Despite the increase in GDP of about 8.1 % higher compared to the previous year, local government revenues, about the Gross Domestic Product, accounted for 1.37% compared to 1.29% in 2022, thus reflecting the increased role of local government in terms of public investments and the functions it exercises.

The level of local government spending for 2023 was 68.8 billion ALL, compared to 51.6 billion ALL in 2020. This represents an increase of 17.2 billion ALL or about 33 percent compared to local spending in 2020. During the year 2023, we can say that the fluctuations resulting from the negative effects of several years ago have already been stabilized and the processes of public financial management at the local level have kept up the positive trend. In 2023, local government expenditures vis-à-vis the general public expenditures, will account for 10.2 percent compared to 9.63 percent in 2020.

After the year 2016, which marked the beginning of the full implementation of the administrative-territorial reform and the deepening of fiscal decentralization, the local government's investments have undergone significant growth over the years as in Figure 3, but their volume has fluctuated, [5].

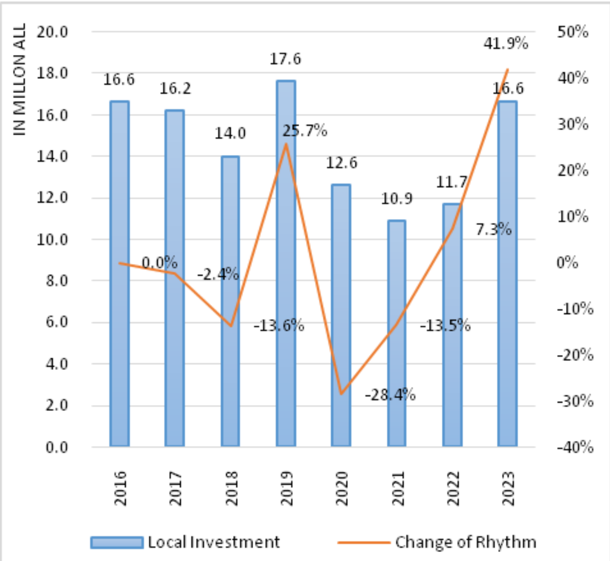

Fig. 3: Investment expenses (in million ALL)
Source: [3]

2 Literature Review

The allocation of funds or, in other words, the income derived from national sources for the local government acts as a fiscal balance between the central government and the local government, [6]. Revenue-sharing funds are funds that originate from the state budget allocated to the local government based on the fact that they are offered to finance regional needs in the context of the implementation of decentralization, [7], [8]. The effect of revenue from national resources provided by the central government to the local government is found to have a positive effect on the increase of investments in the local government, but this effect is not very significant, [9].

However, the Revenue Allocation Fund also has an impact on increasing local government spending for investments, [10]. The results of some studies concluded that central government revenue-sharing funds had a significant positive effect on local government investment spending, [11]. Other factors that have been identified as influencing the level of capital investment for local government are local government's income, capital or other current expenditures, and economic growth, [12].

The own income that the local government owns, among other things, had a significant positive effect on the growth of local government investments, [13]. Local government's revenue is seen as the main resource available to Local Government Units (LGUs) through which it is then used to finance development and service to the community in the form of capital expenditure to increase welfare.

The impact of LGUs' revenues on capital expenditures is seen in different research studies. The studies concluded that the greater the source of own revenue at the disposal of LGUs, the greater the impact they have on the capital expenditures they can provide to the local government community of which they are a part, [14]. Likewise, the results of the researchers concluded that the increase in the local government's revenue had a positive impact on capital expenditure, [15]. The relation between revenues from own sources and capital expenditures is significant because the own revenue has a positive effect on capital expenditure. This means that the higher the own revenue fund available to the LGUs, the higher the capital expenditure, [16], [17].

Capital expenditure for local government is an important component of expenditure for economic growth. Given that the capital expenditures are executed by the LGUs, the government will have a multiplier effect to move the chains of the regional economy, [18]. Therefore, the higher the ratio of capital expenditures in a local self-government unit, the more positive and fruitful the effect that the latter will have on the economic performance of that unit or the country as a whole. And conversely, the lower the ratio, the smaller the effect on economic growth. The increase in capital expenditure aims to improve the economic performance and the welfare of the community, [19].

3 Methodology

The objective of this paper is to find a statistically significant relation between the independent variables of Own Revenues and Transfer and the dependent variable of Investment and to empirically test the hypotheses laid out to build the model. The empirical model used on paper for the evaluation of the Albanian case is based on the theoretic model built by other authors where unconditional transfer and own source revenues may lead to a crowding-in effect of capital investments of local government, [20].

The research questions were drafted as follows:

- Do own revenues positively affect the growth of Local Government Capital Investments?
- Do general and sectoral unconditional transfers, positively affect the growth of Local Government Capital Investments?

To test the research questions (hypotheses) posed in this paper, quantitative data generated by GFIS (Government Financial Information System) [3] were used for 61 municipalities in a span of 4 years, 2020-2023. The available data were used precisely to test the validity of the hypotheses laid down in this paper.

The statistical method of simple and multiple regression was used to draft this paper. Secondary data, data analysis, and various figures were also used in the paper. The paper tries to find a statistically significant relation between the Own Revenues and Transfers as independent variables and the Investments as dependent variables and to empirically test the research questions (hypotheses) posed. We used in this paper a quantitative method, including data generated by GFIS [3] for LGUs.

Table 1. Descriptive statistic

Variables	The number of choices for each variable
Own Revenues	61 municipalities/ 2020-2023
Transfers	61 municipalities/ 2020-2023
Total	61 municipalities/ 4 years

Source: Author's calculation in SPSS Statistics, 2024

The available data were used precisely to test the validity of the questions raised in this paper. The selection made in this paper represents 61 of the 73 LGUs, thus focusing only on the country's municipalities, excluding the 12 regional councils, and for 4 years 2020, 2021, 2022, and 2023. Table 1 shows the variables and the choices for each variable.

4 The Statistical Model used to Test the Relation between Own Revenues, Transfers and Public Investment

Based on the review of the literature and the analysis of the collection and use of local revenues, we continue this section to test the independent variables and the impact they have on the Investments as a dependent variable. Figure 4 shows the research questions or hypotheses of the model.

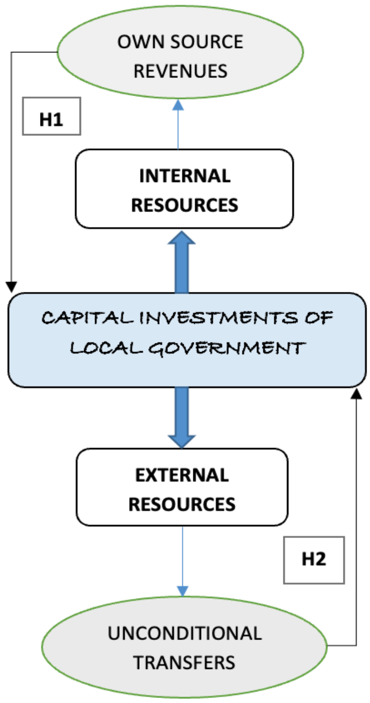

Fig. 4: Model and Research Questions (Hypotheses), author's model

4.1 Data Generation and Hypothesis Testing

The data used for hypothesis testing were accessed and generated by the Government's Financial Information System for 4 years 2020, 2021, 2022, and 2023 for all 61 municipalities of the country. The data accessed was used for this purpose exactly to measure the independent variables that are included in this paper. The size of the available population was 73 local self-government units, however, since the regional councils have small budgets and development potential, we decided to take only 61 municipalities in this paper, on the other hand, and the data were selected for the last 4 years, even though the interval time of available data was much larger, the choice was random, and the final choice was limited to 4 years period 2020-2023 and 61 municipalities. The available data were analyzed using the SPSS program, from which conclusions were generated. A regression analysis was done to test the hypotheses. The objective of this analysis is to examine to what extent independent variables affect local government capital investments. For each of the variables, the fact is tested if they have a significant impact, i.e. the statistically significant relationship is presented, and in addition, if the effect they have on the dependent variable appears with a positive or negative impact, which confirms the relations predicted in the literature. To answer these questions, an empirical analysis was performed, the outputs of each were generated using SPSS and will be interpreted in the following sections.

While capital investments are the focus of our study and will therefore be the dependent variable in the model, that is, the explained variable, we have other variables, which are mentioned in the paper, and which will play the role of explanatory variables or, in other words, independent variables, [21].

The data processing analysis starts first with the interpretation of the internal consistency or the internal consistency of the model. The aspect of the analysis is tested by Cronbach's ALPHA factor. The result is presented in Table 2. The variables all show a good internal consistency since each value for each of the independent variables represents a value greater than the critical value of Cronbach's ALPHA [22], which is equal to 71.

Table 2. Internal consistency of the model, Cronbach's ALPHA

Variables	No. of data	Cronbach's ALPHA
Own Revenues	4 years/ 61 municipalities	.995
Transfers	4 years/ 61 municipalities	.969

Source: Author's calculation in SPSS Statistics, 2024

The second step of the analysis is to test the correlation between the variables included in the model. Table 3 shows the correlation between the independent variables. According to the table, there seems to be a significant positive relation between the Own Revenues and Transfers variables, because the Pearson Correlation for these variables according to the values presented in the table is greater than the critical value of the Pearson coefficient at 0.7, [23]. This means that, when one of the factors increases or, let's say, improves, the other factor also increases or improves its indicator, but not in total to the same extent. The improvement of one factor compared to the other is presented in % and as can be seen in Table 3, it is 0.891.

Since, according to the correlation table, the explanatory variables are correlated with each other, we have developed the VIF (Variance Inflation Factor) test, through which we test whether multicollinearity affects our result, and we have found that this is not the case, because the results seem to be smaller than the critical level 5, which means that this level of multicollinearity between our independent variables doesn't affect our model. According to the output from SPSS, in our case, the VIF of our independent variables is 4.8, so the result shows that it doesn't affect our model. The correlation of the explanatory variables with each other may have occurred because the part of the fiscal equalization of the unconditional transfer formula is related to a part of the local revenues. This correlation may be the subject of another special study on this matter.

Table 3. Correlation between variables

		Own Revenues	Transfers
Own Revenues	Pearson Correlation	1	.891**
	Sig. (2-tailed)		.000
	N	61	61
Transfers	Pearson Correlation	.891**	1
	Sig. (2-tailed)	.000	
	N	61	61

***. Correlation is significant at the 0.01 level (2-tailed).*
Source: Author's calculation in SPSS Statistics, 2024

After the correlation analysis and VIF analysis, the validity testing of the model was conducted. The necessary data to be available in this penultimate step before the construction of the regression is presented in Table 4 from where we find a value of the R2 coefficient equal to 0.970 or, if converted into a percentage, about 97%, which means that 97% of the model built in this paper is explained by the two selected variables and the remaining part is explained by other variables that are not included in this paper. It should be mentioned that based on the value generated by SPSS, the explainability of this model by these two selected variables is significantly high.

Table 4. Model summary table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985[a]	.970	.969	.17491456

a. Predictors: (Constant), Transfers, Own Revenues
Source: Author's calculation in SPSS Statistics, 2024

The last step of the empirical analysis is the evaluation of the multiple linear regression equation, which was evaluated using the SPSS statistical software, the results of which are illustrated in Table 5.

Table 5. Output table

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.223	.022		.000	.0005
	Own Source Revenues	.840	.050	.840	16.903	.0005
	Transfers	.160	.050	.160	3.215	.002

a. Dependent Variable: Investments
Source: Author's calculation in SPSS Statistics, 2024

Model:

$$Y = B_0 + B_1 \text{ Own source Revenues} + B_2 \text{Transfers} + e$$

Where:
- Y => Investments
- Own Revenues => Own revenues
- Transfers => general and sectorial unconditional transfer
- e => Error term

$$Y = 0.223 + 0.840 \text{ Own Source Revenues} + 0.160 \text{ Transfers}$$

4.2 Interpretation of Variables

The regression shows that if we keep Transfers = C (constant) Y = 0.840 Own Revenues. Therefore, if Own Revenues = 1 then Y = 0.840.

We make the same interpretation for the remaining variable in the following:

If we keep Own Revenues = C (constant) Y = 0.160 Transfers. Thus, if Transfers= 1 then Y = 0.160. And if we hold both independent variables of the model constant, then Y = 0.223.

4.3 Testing Research Questions (Hypotheses)

When looking at the significance (SIG) of the observed variables against each other we see that the sig. Own Revenues = 0.0005 < than the 5% level of critical level significance. In this way, this hypothesis is correct, then the question: Own income positively affects the growth of Local Government Capital Investments, is fully supported, so this hypothesis stands.

Moreover, according to Sig-based testing, we see that sig. of PF = 0.002 < than the 5% level of significance of the critical level. So, this question (hypothesis) also stands. General and sectoral unconditional transfers have a positive effect on the growth of Local Government Capital Investments, it is fully supported, so this hypothesis stands.

General and sectoral unconditional transfers positively impact the growth of Local Government Capital Investments. This hypothesis is supported, showing that these transfers boost local government expenditures, particularly in investments. The significance level of the observed variables is below the 5% critical threshold, confirming this effect.

Multicollinearity analysis indicates that this issue is not significant in our model. Although our independent variables show correlation levels above the critical value of Cronbach's Alpha (71), the Variance Inflation Factor (VIF) values for our predictor variables do not exceed 5. Additionally, although quantitative data can sometimes generate misleading correlations due to repetitive numbers, this does not appear to have impacted our findings.

As we see, both research questions (hypotheses) posed in this paper are statistically significant and have a positive impact on the growth of Local Government Capital Investments, [24].

5 Conclusions

The results of the empirical analysis, which is carried out in this paper based on the integrated model with variables generated from the literature [25], what the legislation indicates and based on the practice of financial management in the structure responsible for local finance in the Ministry of Finance of Albania, are discussed in response to the questions; how and to what extent do variables such as own income and transfers affect public investments made by municipalities regarding the welfare of the community?

The final focus was exactly the 61 municipalities of the country with data generated by GFIS [3] for a period of 4 years 2020-2023. The data generated by GFIS [3] for this period were used precisely to test the validity of the hypotheses launched in this paper. The size of the available population was large (n=61 municipalities data spread over four years).

Based on the statistical model of the realized regression, the impacts and potential impacts, that these variables under consideration have on the dependent variable, have been proven.

Moreover, it should be underlined that since we are dealing with quantitative data and not conceptual connections, the program generates a correlation between variables which is somehow understandable, but after the VIF test it turns out that the two concepts do not have a correlation that affects our model, so we are dealing with a result, which shows that it does not affect our model.

The limitations of this study primarily revolve around data quality, as the accuracy of results heavily depends on the integrity of the data. Additionally, a small or moderate sample size is another limitation that may reduce the statistical power, leading to unreliable or non-generalizable results. Overfitting is another concern, where variables perform well on the current dataset but fail with new data. Moreover, the use of quantitative data without addressing conceptual connections may lead to misleading correlations, as repetitive numbers can skew the analysis.

Of all the findings and conclusions that we have obtained and reached based on the results obtained from the tested model, we can say that there are several limitations or implications, which have had their impact on this study. The selection of choice made in this study presents a focus on the municipalities as local self-government units regarding the selection not due to lack of data, and not chosen randomly. As stated above, the focus was set on 61 municipalities for the period 2020-2023.

Based on the findings and conclusions of this paper, generated by the empirical data analysis, we may recommend some aspects that require focus and the necessity to improve in later periods.

- Own revenues of the municipality are very important in terms of increasing their financial autonomy from the central government. The municipalities must increase the collection of their revenue from taxes or local fees and their collection rate should be compared with the plan and objectives that they have and, at the same time, they should be compared with the fiscal potential they have. The focus in this direction will affect the increase of the share of the municipalities' revenues, thus making them more autonomous from the influence of the central government on their activity.
- What's more, another recommendation for municipalities is to increase the share of investment expenses compared to the share of current expenses, as this would directly affect the lives of citizens.

References:

[1] González-Alegre, J., Does fiscal decentralization affect the effectiveness of intergovernmental grants? *European regional policy and Spanish autonomous regions. Papers in Regional Science (RSAI)*, Vol. 94, No. 4, 2015, pp. 817-848. DOI: 10.1111/pirs.12098.

[2] Lestari, S., Utama, M.S., "The effect of local government own revenue and revenue sharing funds on economic performance and community welfare through capital expenditure of regency/City in Bali Province, Indonesia", *Russian Journal of Agricultural and Socioeconomic Sciences,* ISSN: 2226-1184, RJOAS, 7(91), 2019, pp. 67-87. DOI: 10.18551/rjoas.2019-07.08.

[3] Ministry of Finance of Albania, *Government Financial Information System,* [Online]. https://financa.gov.al/raportime-statistika/ (Accessed Date: April 3, 2024).

[4] Law no. 68/2017 *"On Local Self-Government Finances"*, Republic of Albania, [Online]. https://financa.gov.al/wp-content/uploads/2024/02/LIGJ-nr.-68-date-27.4.2017-Per-financat-e-veteqeverisjes-vendore.pdf (Accessed Date: April 2, 2024).

[5] Muharremi, O., Çakërri, L., Madani, F., An Analysis of the Fiscal Administrative-Territorial Decentralization Reform Impact in Albania, *Journal of Public Administration, Finance and Law*, Vol. 10 No. 19, 2021, pp. 185-202. DOI: 10.47743/jopafl-2021-19-14.

[6] Saragih, S., The Effects of Job Autonomy on Work Outcomes: Self Efficacy as an Intervening Variable, *International Research Journal of Business Studies*, Vol 4, No. 3, 2011, pp. 203-215. DOI: 10.21632/irjbs.4.3.203-215.

[7] Andhini,S., Gunawan,J., Chen, H.Y., "Influence of general allocation fund, special allocation fund, and capital expenditure on financial performance of local government", *International Journal of Contemporary Accounting*, Vol. 5 No. 2, 2023, pp. 125-140. http://dx.doi.org/10.25105/ijca.v5i2.17381.

[8] Yasin, M., "Analysis of regional original income levels in regional financial performance on economic growth in East Java Province", *Archives of Business Research*, Vol. 7 No. 10, 2019, pp. 222-229. https://doi.org/10.14738/abr.710.7320.

[9] Supriyatno, B., The Effect of Decentralization Policy in Improving

Community Welfare Regional Government of Special Yogyakarta-Indonesia, *Published by Canadian Center of Science and Education*, Vol. 15, No 1, 2021, pp. 95-107. doi: 10.5539/mas.v15n1p95.

[10] Bremer,B., Di Carl,. D., Wansleben, L., The constrained politics of local public investment under cooperative federalism. *Socio-Economic Review*, Vol. 21, No. 2, 2023, pp. 1007–1034. https://doi.org/10.1093/ser/mwac026.

[11] Yousaf, T., AIN, Q.U., Akhtar, Y., Shah, W.H., The Crowding in (out) Effect of Intergovernmental Transfers on Local Government Revenue Generation: Evidence from Pakistan. *Review of Public Economics (Hacienda Pública Española/), Instituto de Estudios Fiscales,* Vol. 242, No.3, 2021, pp. 3-28. https://dx.doi.org/10.7866/HPE-RPE.22.3.1.

[12] Järnberg, L.A., Värja,V., The composition of local government expenditure and income growth: the case of Sweden. *Regional Studies*, Vol. 57, No. 9, 2023, pp. 1784–1797. https://doi.org/10.1080/00343404.2022.2131755.

[13] Sri, L., Suyana, U.M., The effect of local government own revenue and revenue sharing funds on economic performance and community welfare through capital expenditure of regency / city in bali province, Indonesia, *RJOAS*, 7(91), 2019, pp. 67-87. DOI: 10.18551/rjoas.2019-07.08.

[14] Andini, M.N., Arifin, K. Z., Nurhasanah, N., "The effect of fixed assets value, regional original income and capital expenditures on maintenance expenditures in the District/City of South Sumatra Province", *Indonesian Journal of Multidisciplinary Science*, Vol. 1, No. 10, 2022, pp. 1245-1259, P-ISSN:2808-5927, E-ISSN: 2808-6724, [Online]. https://ijoms.internationaljournallabs.com/index.php/ijoms/article/view/198/399 (Accessed Date: April 11, 2024).

[15] Lhutfi, I., Ritchi,H., Yudianto,I., Do the Growth of Original Local Government Revenues and the Growth of Capital Expenditure Affect Fiscal Stress? *Journal of Economics, Business, and Accountancy Ventura*, Vol. 23, No. 1, 2020, pp. 1-11. DOI: 10.14414/jebav.v23i1.1727, [Online]. https://journal.perbanas.ac.id/index.php/jebav/article/view/1727/pdf (Accessed Date: April 11, 2024).

[16] Lutfiana Dewi Saputri, Zulfikar, The effect of local government revenue on capital expenditures with economy growth as moderating, *International Conference on Accounting and Finance(2023)*, Universitas Islam Indonesia, Vol. 1, 2023, pp. 84-92, [Online]. https://journal.uii.ac.id/inCAF/article/view/27426 (Accessed Date: April 18, 2024).

[17] Purba, N.E., Sari, R.L., Tanjung, A.A., "Analysis of the Influence of Regional Original Income (PAD), Regional Expenditures on Economics Growth of District/City in North Sumatera Province", *International Journal of Research and Review*, Vol. 9, No.3, 2022, pp.450-470, E-ISSN: 2349-9788, P-ISSN: 2454-2237. https://doi.org/10.52403/ijrr.20220350.

[18] Saragih, J. P., The Fiscal Capacity of The Seven New Provinces and its Implications, *Journal of Economics and Policy*, Vol. 9, No. 2, 2016, pp. 180-199. http://dx.doi.org/10.15294/jejak.v9i2.7625.

[19] Sutopo, B., Siddi, P., "Capital Expenditures and Performance of Local Government Administration", *Polish Journal of Management Studies*, Vol.17, No.1, 2018, pp. 221-231. DOI: 10.17512/pjms.2018.17.1.18.

[20] Caldeira, E., Rota-Graziosi, G., The Crowding-in Effect of Simple Unconditional Central Grants on Local Own-Source Revenue: The Case of Benin. *Journal of African Economies*, Vol. 23, No. 3, 2014, pp. 361-387. https://doi.org/10.1093/jae/eju003.

[21] Mustaqe, E., Mamo, J., Salko, D., "The effect of foreign direct investment inflows on non-performing loans", *Journal of Governance and Regulation*, Vol. 13, No. 1, Special Issue, 2024, pp. 499-505. https://doi.org/10.22495/jgrv13i1siart22.

[22] Bushashe, M.A., Bayiley, Y., Fiscal federalism and public service provision in Ethiopia: A mediating role of sub-national governments capacity. *Cogent Economics & Finance*, Vol. 11, No. 2, 2023, pp.1-21. https://doi.org/10.1080/23322039.2023.2255496.

[23] Adedire, S. A., Ganiyu, S.O., Bello,O.W., "Structure and Authority in the Nigerian Intergovernmental Relationships: Contextual and Theoretical Framework", LAPAI International *Journal of Management and Social Sciences*, Vol.15, No. 2, 2023, pp. 25-33, ISSN: 2006-6473, [Online]. https://ojs.ibbujournals.com.ng/index.php/lijo

mass/article/view/1152/1144 (Accessed Date: May 9, 2024).

[24] Ramli, F., Safitri, Y., "The effect of natural resources on human development through capital expenditure as an intervening variable in Jambi Province", *Journal Sustainability (STPP) Theory, Practice and Policy*, Vol. 2, No. 2, 2022, pp. 209-222, ISSN: 2808-4829. https://doi.org/10.30631/sdgs.v2i2.1454.

[25] Kii, H.E., Harmono, Sumtaky, M., The Effect of Regional Taxes, Regional Levies, Balancing Funds, and other Legitimate Regional Revenues on Regional Independence Through Direct Expenditure (Empire Study: District/City Governments in East Nusa Tenggara Province), *European Journal of Business and Management Research*, Vol. 7, No. 6, 2022, pp. 204-213, ISSN: 2507-1076. DOI: 10.24018/ejbmr.2022.7.6.1719.

Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

The authors equally contributed in the present research, at all stages from the formulation of the problem to the final findings and solution.

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The authors have no conflicts of interest to declare.