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Analysis of Local Government Financial Capability and its Implications for the Sustainability of Regional Autonomy: The Perspective of Public Interest

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Abstract
Regional autonomy, or regional financial capacity, is an indicator used to assess the level of regional autonomy as one of the requirements for financing public services and development. The government's function will not be practical unless it receives maximal budget assistance; the government must have adequate local sources of revenue. This research aims to examine the diversity of regional financial capacity levels and their implications for the sustainability of regional autonomy from the perspective of community interests. This research method utilized multivariate statistics, profile analysis, and variance analysis. Data related to locally generated income, total regional income, total routine expenditure, and fund balance during 2013–2017 were analyzed and compared to assess the level of autonomy. In Lampung Province, 14 regional governments showed low levels of fiscal autonomy, routine expenditure index, and regional financial capacity. These regions were highly dependent on central government assistance through intergovernmental transfers. Between 2013 and 2017, only Bandar Lampung City and Metro City saw an increase in Local Government Revenue (PAD). Other regions stagnated, indicating low financial autonomy in the future due to fund transfers. This makes it difficult to meet public satisfaction levels in infrastructure, health, education, and social development due to budget limitations.

Keywords: *local government autonomy, central government, sustainability of local government autonomy, public services, public interest.*

Paper type: *Research paper*

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INTRODUCTION

The decentralization in Indonesia has been effectively implemented only with the arrival of the post-New Order government, and the country used to be governed by a centralized government. Decentralization can be defined as a transfer of managerial responsibilities and powers from the central government to lower governmental levels (Falleti, 2004; Islam, 2012; Devkota, 2013; Pancholi, 2014; Samadi et al., 2013, Renu, 2014). Decentralization practices can be categorized into at least the following four groups: administrative, political, fiscal, and economic (Cheema and Rondinelli, 2007, p. 6).

Kwon (2003) suggested that decentralization may improve the performance of the public sector. Since the enactment of the Financial Balance Act between the central and local governments, the implementation of regional autonomy has entered a new era, namely the implementation of fiscal decentralization. The purpose of its implementation is to transfer authority from the central government to the local governments in the form of the authority to collect taxes and transfer assistance from the central government to the regions.

In the context of implementing regional autonomy, it is important to have clarity concerning the authority and maximum budget support. Therefore, at the level of implementation of regional autonomy, there are consequences not only regarding the source of funding but also related to sources of regional income such as locally generated revenue (LGR). If an authority does not produce a source of locally generated revenue (LGR), then it must be borne by the local government that becomes responsible for it through local government budget (LGB) funding. Conversely, the authority that has an impact on the source of LGR revenue will contribute to an LGB increase.

According to Martinez and Mc Nab (2001), there are two reasons for the interest in fiscal decentralization: (1) To increase efficiency in public spending, (2) As a reaction to the failure of large centralized bureaucracies under various political regimes in developing and transition countries. Local governments, in accordance with their capabilities and authorities, must be able to increase regional income. Local governments need financial support to provide public social services, such as

health, education, water, and road infrastructure to residents (Ng'eni and Chalam, 2016). However, the question is whether the local government, with its authority, can maximize the financial capacity of the region. In reality, for the past 18 years, despite fiscal decentralization on January 1, 2018, in Indonesia, local government dependence on regional financial transfers (RFT) from central governments has been very high. Thus, the average LGB dependence on RFT is 80.1%, whereas the LGR contribution is Local governments are required to increase regional revenues in accordance with the authority they have. Fiscal dependence on the central government is even more severe for the regional/municipal governments at the district/city level, where the focus on regional autonomy and fiscal decentralization is placed (Nugraha, 2019, p. 1).

This research will also explore the implications for future regional sustainability, which is essential for comprehending the region's financial prospects in the future. The assumption is that if the regional financial model continues to rely on fund transfers from the central government and the regulations controlling regional revenue sources remain unequal between the central and regional governments; then regional government revenues will continue to be heavily reliant on the center in the future.

Based on the background of the study above, this study will explain why the level of regional independence tends to be low, varied, and powerless in increasing local original income. Moreover, this study not only describes the lack of regional independence but also explores the implications for the sustainability of the region in the future. Therefore, this study is to examine and compare the financial condition of the regions in Lampung Province, where there are 14 districts to be analyzed. That is comparing the degrees of fiscal autonomy, the ratio of routine expenditure, and regional financial capability.

Theoretically, the financial capacity of a region will have an impact on the interests of society. According to Osborne and Gaebler (1992), regions with good financial capacity are able to respond to the interests of the community more effectively. They propose an adaptive and results-oriented management approach to meet the expectations of the community. The interests of the community here are defined as "the interests of the entire society". It is a development activity carried out and subsequently owned by the government and not used for profit-seeking. The types of public interest activities are as follows:

a) Public roads and highways, railways (above ground, elevated, or underground), drinking water supplies/clean water, drainage, and sanitation channels.
b) Reservoirs, dams, irrigation dams, and other irrigation structures.
c) Ports, airports, train stations, and terminals.
d) Public safety facilities, such as flood control embankments, lava flow mitigation, and other disasters.
e) Waste disposal sites.
f) Nature reserves and cultural heritage sites.
g) Power generation, transmission, and distribution (Presidential Regulation Number 65 of 2006 regarding Amendments to Presidential Regulation Number 36 of 2005 concerning Land Acquisition for Public Interest Development)

Thus, the financial capability of the region is closely related to the sustainability of regional autonomy and the interests of the community. According to Suwanan and Sulistiani (2009), they stated that high levels of decentralization are associated with low regional disparities. Therefore, poor areas benefit from decentralization, ironically. Furthermore, Lewis (2005) concludes that during the post-decentralization period, the fiscal behavior of resource-rich regions indicates that local government spending is partly responsive to increasing needs and partly targeted by elite struggles; local government taxation has become more aggressive under decentralization and is largely driven by local bureaucratic expectations regarding routine overhead budgets; and the increase in local government savings during the post-decentralization period was largely determined by delays in payment of central government transfers. Wibisono and Yuliana (2012) found that the level of dependency of regencies/cities in East Java is still high on the central government, which is characterized by the LGR that is still small and the structure of LGB revenue that is still dominated by donations and assistance from the center. Additionally, Zhang and Zou (1998) identified that there is a negative impact of fiscal decentralization on economic growth and that it is less influential for development. However, findings by Iimi (2005) and Malik (2006) indicate different

results that suggest that fiscal decentralization has a positive influence on economic growth**.**

According to Badrudin and Baldric (2015) the implementation of regional autonomy in Indonesia has not yet achieved its goal, namely community welfare. There are many factors that cause the objectives not yet achieved, including the inability of local governments to manage finances, the existence of budget irregularities, and ineffective LGB allocation related to the opportunistic behavior of politicians and local government officials. In addition, the use of the budget for public purposes is still low.

In Indonesia, with the post-New Order era, center–region relations have fundamentally changed, not only in the context of granting regional autonomy by giving real authority in governance management but also in fiscal decentralization. Fiscal decentralization is a fiscal transfer system, and local government finances from the central government to local governments (Satta and Pennink, 2013; Boschmann, 2009). and the goal of the fiscal decentralization program is to improve the efficiency of national and regional governments (Subiyantoro, 2010, p. 4). Siddiquee et al., (2012) stated that fiscal decentralization aims to reduce the dependence of local government on the central government.

However, regarding democracy in the region, decentralization has become a strategy to both improve the efficiency and effectiveness of the government and promote democracy and development at the local level. Because decentralization brings government closer to the community, it allows local people to participate in the decision-making process, thereby ensuring that local decisions are relevant and adapted to local needs. Moreover, it is maintained that decentralized governance whose representatives are in close contact with their electorate will be more responsive to the needs and aspirations of the local people (Crook and Manor, 1998; Crook, 2003). Thus, with a decentralized policy, local governments gain increased financial authority to generate revenues and use them locally. It is expected that the local government would strive to improve the share of local revenue; this would help it to reduce its dependency on the central government (Siddiquee et al., 2012, p. 46).

Regional financial capacity can be seen from the degree of fiscal autonomy (DFA), routine expenditure index (REI), and regional financial capability (RFC).

The level of fiscal autonomy, also known as decentralization of fiscal autonomy, is the percentage of Local Government Revenue (LGR) compared to total regional revenue. This measure shows the authority and responsibility given by the central government to regional governments to extract and manage revenues. The higher the contribution of Local Government Revenue, the higher the region's ability to organize decentralization (Haryanto, 2014:22). While the Routine Expenditure Index (REI) measures regional financial capacity through the perspective of regional financing (Sijabat, et al. 2014: 238). Routine financial ability is a measure that describes the extent to which a region's LGR ability can finance its routine expenditure. REI is described by the percentage of LGR compared to the routine expenditure of a region.

Sularso and Restianto (2011:113) define the ratio of regional financial independence as the ratio of regional dependence on external party assistance, especially the central and provincial governments. The higher the level of regional independence indicates the lower the level of regional dependence on external parties. Vice versa, the lower the level of financial independence of a region, the higher the level of regional dependence on external parties.

To measure the Regional Financial Independence Ratio, a formula is used below:

Formula 1.
Measuring the Regional Financial Independence Ratio

$$DFA = \frac{LGR}{Local\,\mathrm{Re}venueTotal} \times 100\%.$$

Based on the formula above, it can be seen that the ratio of regional financial capacity describes the region's dependence on external funding sources. The higher this ratio, the lower the level of regional dependence on external assistance, and vice versa. This ratio also describes the level of community participation in regional development. The higher this ratio means, the higher the level of community participation in paying regional taxes and fees, which are components of Local Government Revenue (LGR).

In addition, regional financial capacity can also be seen from the Regional Financial Dependency Ratio.

The regional financial dependency ratio is the ratio that measures the level of regional ability to increase LGR, as measured by the ratio between transfer income and total regional revenue/total regional income. Based on this ratio, the higher the resulting ratio, the greater the level of dependence of local governments on the central government and/or provincial governments. The category in the dependency ratio is the same as the financial independence ratio by its calculations. In this study, calculate the Regional Financial Dependency Ratio using the following formula:

Formula 2.
Regional Financial Dependency Ratio 2

$$RFC = \frac{Transfer\,Revenue}{Total\ \ Regional\,Revenue} \times 100\%.$$

Another measurement is by looking at the routine capability. The Routine Capability Index (IKR) is the proportion between LGR and routine expenditure/operating expenditure without transfer income from the central government and also transfer income from the provincial government. The IKR ratio is the magnitude of the local government's ability to finance operating costs in carrying out its government activities. The higher the IKR ratio, the higher the regional financial capacity to support regional autonomy. In calculating the IKR ratio in this study using the following formula:

Formula 3.
Calculating The IKR of Ratio

$$REI = \frac{LGR}{Total\ Operating\ Expense} \times 100\%.$$

Thus, the regional autonomy policy and decentralization of authority are not only related to the transfer of authority from the top down, but they also need to be realized from the bottom to encourage the growth of the independence of the regional government itself as a factor determining the success of the regional autonomy policy. In a paternalistic culture of society, decentralization, and regional autonomy policies will be unsuccessful if they are not accompanied by conscious efforts to build regional self-reliance and independence.

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METHODS

The data were collected from 14 local governments in Lampung province during the period 2013–2017. The local governments are: D1–South Lampung; D2–Metro; D3–Tanggamus; D4–East Lampung; D5–Pringsewu; D6–Tulang Bawang; D7–Bandar Lampung; D8–West Lampung; D9–Pesisir Barat; D10–Mesuji; D11–Pesawaran; D12–West Tulang Bawang; D13–Middle Lampung; and D14–North Lampung. Data encompass the ratios of degrees of fiscal autonomy (R1), routine expenditure index (R2), and regional financial capability (R3).

To analyze the data, the Profile Analysis (repeated measures MANOVA), suggested by many authors (Khattree and Naik, 2005; Morrison,1976; Srivastava, 2002; Tabacknick and Fidel, 2007), is the most appropriate to analyze this type of data. There are three null hypotheses to be tested, namely: Ho1: the 14 local governments in Lampung Province profile parallel; Ho2: The profiles are coincidental, given that they are parallel; and Ho3: The profiles are horizontal. To gain more understanding, the above null hypotheses are to be tested sequentially and subjected to the acceptance of the hypothesis at the previous stage. Specifically, we can ask: Are the profiles parallel? If so, are they coincidental? Finally, if so, are they all horizontal? (Rencher, 2002; Khattree and Naik, 2005).

There are several different multivariate test statistics available to test the parallel profile, and generally, they give equivalent results. Four common statistical tests are Wilks' lambda, Pillai's trace, Hotelling–Lawley trace, and Roy's greatest root(Rencher, 2002; Khattree and Naik, 2005). Wilks' lambda (Λ) is the most desirable because it can be converted precisely to an F-statistics (Morrison,1976; Srivastava, 2002). If the hypothesis of the parallel profile is not rejected, then we can test the second hypothesis: Are the profiles coincidental? To test Ho2, we further used test statistics Wilks' lambda, Pillai's trace, Hotelling–Lawley Trace, and Roy's greatest root (Rencher, 2002; Khattree and Naik, 2005). However, if the hypothesis pertaining to parallel profile (Ho1) is rejected, the null hypothesis (Ho2) of coincidental profiles will have no meaning. Timm (1975) suggested that when the parallel hypothesis is rejected, it may be best to analyze each district group separately. If the hypothesis of coincidental profiles is not rejected, then we can test

the third hypothesis: Are the profiles horizontal? To test Ho3, we use test statistics Wilks' lambda, Pillai's trace, Hotelling–Lawley trace, and Roy's greatest root (Khattree and Naik, 2005). If the null hypothesis of Ho1 is rejected, not parallel, the implication of this result is that the other two hypotheses, Ho2 and Ho3, should not be tested. At this point of the rejection, the null hypothesis of coincidental profiles and the null hypothesis that the profiles are horizontal are meaningless due to the rejection of the parallel. Then, the analysis will be conducted using univariate analysis of variance for the ratio of degrees of fiscal autonomy (R1), (b) ratio of routine expenditure index (R2), and (c) regional financial capability (R3), respectively. The linear model is

Formula 4.
Univariate Analysis of Variance

$$Rm_{ik} = \mu + LG_i + \varepsilon_{ik} \quad (8)$$

where m = 1,2,3; i= 1,2,3, …, 14 (local governments); k = 1,2,3,4,5 (years 2013–2017); Rm is R1, R2, and R3; and LG represents local government. If the model is significant, then the analysis will be continued using Tukey's multiple comparison.

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RESULTS AND DISCUSSION

Descriptive Analysis

Based on the research results, the results of the evaluation of DOF, KR, and KKD are as follows (Table 1)

Table 1.
The Values of DFA, REI, and RFC in 14 districts/cities

No	District	Ratio	Value (%)					Mean	Std
			Year						
			2013	2015	2015	2016	2017		
		DFA	6.53	7.65	8.39	10.00	9.34	8.38	1.36
1	South	REI	10.98	12.84	13.33	18.40	16.16	14.34	2.93
	Lampung	RFC	0.87	10.23	9.89	15.90	17.51	10.88	6.53
2	Metro	DFA	9.36	6.88	8.61	6.43	7.77	7.81	1.20
		REI	20.15	25.22	33.42	24.54	34.33	27.53	6.11
		RFC	17.77	21.71	27.12	18.75	21.10	21.29	3.64
3	Tanggamus	DFA	3.05	2.39	1.85	7.90	4.65	3.96	2.43
		REI	5.81	4.58	3.42	12.99	7.25	6.81	3.73
		RFC	4.34	3.86	2.63	11.98	7.45	6.05	3.75
4	East	DFA	3.44	5.36	5.04	4.60	6.00	4.88	0.95
	Lampung	REI	4.27	8.85	7.45	7.20	8.71	7.29	1.84
		RFC	4.38	8.25	8.07	7.38	7.87	7.19	1.60
5	Pringsewu	DFA	5.97	5.50	6.13	10.25	7.20	7.01	1.91
		REI	9.04	9.22	9.59	18.94	12.64	11.88	4.20
		RFC	8.72	7.92	7.72	14.90	10.42	9.93	2.97
6	Tulang	DFA	5.26	3.04	3.46	2.31	3.53		
	Bawang							3.52	1.08
		REI	7.59	9.29	8.76	7.00	8.13	8.15	0.90
		RFC	6.93	9.12	9.52	5.00	7.56	7.62	1.81
7	Bandar	DFA	21.36	21.49	21.56	23.49	29.44		
	Lampung							23.46	3.45
		REI	26.12	27.30	26.28	31.05	35.66	29.28	4.08
		RFC	37.77	40.91	40.92	36.69	40.79	39.41	2.03
8	West	DFA	4.25	4.56	3.90	4.09	3.97		
	Lampung							4.15	0.26
		REI	7.36	8.61	6.69	7.80	8.26	7.74	0.75
		RFC	5.47	6.45	4.95	5.67	5.41	5.59	0.54
9	Pesisir Barat	DFA	3.25	1.04	2.57	5.20	4.14	3.24	1.57
		REI	5.78	1.97	5.66	11.77	8.37	6.71	3.63
		RFC	4.62	1.40	3.25	6.94	5.80	4.40	2.16
10	Mesuji	DFA	3.36	3.43	3.67	4.86	4.84	4.03	0.75
		REI	8.04	9.16	7.64	10.14	11.73	9.34	1.65
		RFC	4.26	4.73	5.07	6.50	6.94	5.50	1.16
11	Pesawaran	DFA	2.44	3.36	4.06	4.56	4.80	3.84	0.95
		REI	4.44	6.63	7.03	8.55	8.59	7.05	1.70
		RFC	2.96	4.30	5.61	6.46	6.08	5.08	1.43
12	Tulang	DFA	6.92	13.80	10.52	12.85	22.79	13.38	5.89
	Bawang Barat								
		REI	0.37	6.13	4.84	5.38	5.90	4.52	2.37

		RFC	0.03	3.63	2.66	3.38	3.38	2.62	1.49
13	Central Lampung	DFA	5.06	6.04	5.74	4.61	5.36	5.36	0.56
		REI	7.59	9.29	8.76	7.00	8.13	8.15	0.90
		RFC	6.93	9.12	9.52	5.90	7.56	7.81	1.51
14	North Lampung	DFA	1.65	2.09	6.65	5.01	6.71	4.42	2.43
		REI	2.58	3.28	10.12	8.46	11.35	7.16	4.00
		RFC	2.04	2.67	8.94	7.48	9.00	6.03	3.41

Note:
DFA: The Degree of Fiscal Autonomy
REI: Routine Expenditure Index
RFC: Regional Financial Capability
Std: Standard Deviation

Table 1 shows that the DFA of 10 district/city governments tends to increase, namely South Lampung, Tanggamus, East Lampung, Pringsewu, Bandar Lampung, Pesisir Barat, Mesuji, Pesawaran, Tulang Bawang Barat, and North Lampung District. While the district tends to decrease, namely Metro City and Tulang Bawang. For Central Lampung and West Lampung Regencies, the DFA has not changed in five years.

As seen from the REI results, Table 1 also showed that there were ten local governments with an increasing REI tendency, namely South Lampung, Metro, Tanggamus, Pringsewu, Bandar Lampung, Pesisir Barat, Mesuji, Pesawaran, Tulang Bawang Barat, and North Lampung. In comparison, four regencies/cities tend to remain the same in five years, namely East Lampung, Tulang Bawang, West Lampung, and Central Lampung Regency.

In addition, Table 1 revealed that the RFC of 10 local governments with an increasing trend, namely South Lampung, Metro, Tanggamus, East Lampung, Pringsewu, Bandar Lampung, Pesisir Barat, Mesuji, Pesawaran, Tulang Bawang Barat and North Lampung districts. There were three districts with declining RFC trends, namely Tulang Bawang, West Lampung, and Central Lampung.

For the mean result, the data in Table 1 revealed that the average of DFA was 20.22 (from 23.46-3.24 = 20.22). The largest mean was Bandar Lampung City, while the smallest was Pesisir Barat District. Most of the 12 district governments

had DFA <10%, and there were two districts/cities above 10%, namely Bandar Lampung (23.46) and Tulang Bawang Barat (13.37).

The average of REI with a range (29.28-4.52 = 24.76), the largest mean was Bandar Lampung City with an average REI (29.28%), and the smallest was West Lampung District (4.52%), and most are <10%, namely Tanggamus, East Lampung, Tulang Bawang, Lampung Barat, Pesawaran, Tulang Bawang Barat, Central Lampung, North Lampung, Mesuji and those that above 10% were South Lampung and Pringsewu.

For the average RFC with a range (of 39.41=2.61=36.8), the largest mean was Bandar Lampung City with an average of 39.41% and the smallest was in Tulang Bawang Barat Regency 2.61%, and most are <10%, namely Tanggamus, East Lampung, Pringsewu, Tulang Bawang, Lampung Barat, Pesisir Barat, Pesawaran Tulang Bawang Barat, Centra Lampung, North Lampung and those above 10% were Regencies South Lampung, Metro, and Bandar Lampung.

The study would explore and explain the profile analysis and comparison of the financial ability of 14 local governments in the Lampung province, Indonesia, by comparing the (a) ratio of degrees of fiscal autonomy (R1); (b) ratio of routine expenditure index (R2); and (c) regional financial capability (R3).

Profile Analysis

Table 2.
Statistics for Testing Profile Parallel
S = 3 M = 4.5 N = 25.5

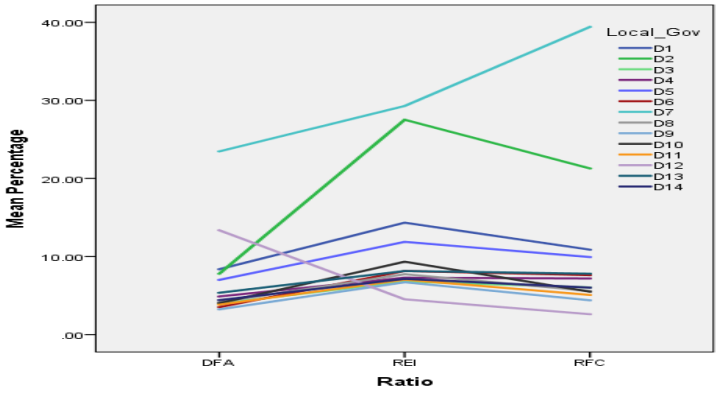
Statistic	Value	F-Value	Num DF	Den DF	p-value
Wilks' Lambda	0.0044	21.20	39	157.69	<.0001
Pillai's Trace	2.3089	14.14	39	165	<.0001
Hotelling–Lawley Trace	21.4225	28.49	39	119.05	<.0001
Roy's Greatest Root	13.9840	59.16	13	55	<.0001

A plot for the profile of R1, R2, and R3 across the 14 local governments in the Lampung province is illustrated in Fig. 1. The figures show that as the profiles have no similar trend, they do not look parallel. The figure indicates that Bandar Lampung (D7) has the highest values in R1, R2, and R3, and is different than the

other 13 local governments; Metro (D2) also has a different profile compared with the other 13 local governments; South Lampung (D1) and Pringsewu (D5) look very close and are parallel; West Tulang Bawang (D12) also showed a different profile compared with other 13 local governments; it was the second highest in R1; however, the lowest in R2 and R3. The other nine local governments: Tanggamus (D3), East Lampung (D4), Tulang Bawang (D6), West Lampung (D8), Pesisir Barat (D9), Mesuji (D10), Pesawaran (D11), Middle Lampung (D13), and North Lampung(D14) have similar profiles. As for the test statistics, also for testing the hypothesis Ho1: The 14 local governments profile parallel, from the SAS printout in Tabel 2 Wilks' Lambda (Λ) yields Λ=0.0044 or F= 21.20 with p-value <0.0001. Therefore, the null hypothesis of parallel profiles is rejected. The other three multivariate tests are also in agreement with this conclusion (Table 2). From Fig. 1, it can be seen that the ratios R1, R2, and R3 across local governments are not parallel. Furthermore, Table 1 shows the results of statistical tests for the similarity of profiles, and the results indicate that the profile parallel is rejected. The implication of this result is that the other two hypotheses, given in Equations (6) and (7), are contingent on the tenability of the hypothesis profile parallel given in Equation (5) and are not to be tested. At this point of the rejection, the null hypothesis of coincidental profiles and the null hypothesis that profiles are horizontal has no meaning because the test of profile parallel was rejected.

Figure 1.

Comparison of 14 Local Governments' Financial Ability (DFA, REI, and RFC) in The Lampung Province 2013-2017.



The next task is to analyze R1, R2, and R3, respectively. In addition, multiple comparison tests for R1, R2, and R3 for each local government using Tukey's LSD with alpha = 0.05 will be presented.

A Comparison of Degrees of Fiscal Autonomy (DFA) of Local Governments in the Lampung Province

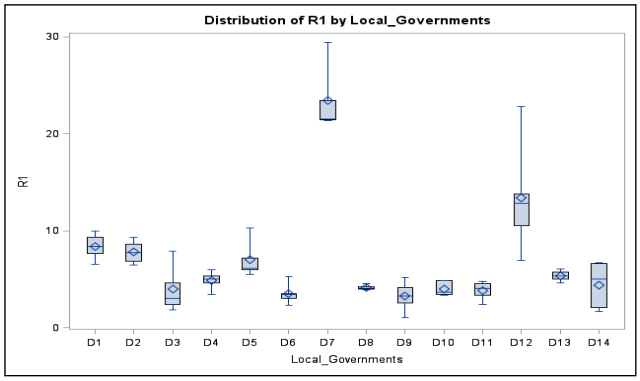
Based on the results of data collection for 14 local governments in Lampung from the *Realization of Regional Revenue and Expenditure Reports* for the period 2013–2017, a data analysis was conducted to determine the level of local government dependence on the central government, as shown in Figure 1. Model (8) for analysis degrees of fiscal autonomy (R1), the results of analysis of variance the model is very significant with p-value <0.0001 (Table 3). R-squares= 0.8714. This means that 87.14% of the variation in the degrees of fiscal autonomy (R1) can be accounted for by the model. Table 3 shows the results of testing the null hypothesis that the degrees of fiscal autonomy among the 14 districts in Lampung are equal, and this null hypothesis is rejected with a p-value <0.0001. Therefore, the degrees of fiscal autonomy in Lampung, at least one of the districts, is different from the others.

Table 3.
Analysis of Variance for Testing The Model Degrees of Fiscal Autonomy (DFA) R1 Across 14 Local Governments

Source	DF	Sum of Squares	Mean Square	F-Value	Pr > F
Model	13	1945.404661	149.646512	28.67	<.0001
Error	55	287.114420	5.220262		
Corrected Total	68	2232.519081			

R-Squares = 0.8714

Figure 2.
Box Plot of Degrees of Fiscal Autonomy (R1) Comparison for 14 Local Governments in Lampung



As indicated by Figure 2, the level of dependency of local governments in the Lampung province is still high, and it can be seen that the portion of central government assistance to each local government is greater than the LGR. However, considering data in Figure 1, Bandar Lampung City (D7) is compared with other local governments whose DFA level is lower and shows that the level of LGR over the past five years from 2013 to 2017, tends to increase. Furthermore, Figure 2 shows that the local government of District Tulang Bawang Barat (D12), one of the new districts (local governments), shows an increasing LGR, and the DFA rate with respect to the central government increased from 6.92% in 2013 to 22.79% in 2017. The local governments of South Lampung (D1), Metro City (D2), and Pringsewu had relatively the same DFA, which indicates that the DFA rate change was very high, showing that the ratio of locally generated revenue (LGR) to total regional revenue (TRR) was much lower. Other nine districts (Tanggamus Regency, East Lampung, Tulang Bawang, West Lampung, West Coast, Mesuji, Pesawaran, Central Lampung, and North Lampung Regency) were in the same group, which was very low, as measured by the ratio of locally generated revenue (LGR) to total regional revenue (TRR).

The high degree of fiscal local governments' dependence on the central government shows that the contribution of LGR sources, namely taxes and other legitimate revenues to LGR, was still small due to the tax and retribution sectors that have not experienced much intensification or extensification except for Bandar Lampung City(D7). In Bandar Lampung, the service and trade sectors had very high growth and were correlated with an increase in taxes and other legitimate revenues to LGR.

The results of multiple comparisons of Turkey's studentized range test (Table 4) show that the DFA (R1) of the Bandar Lampung (D7) (mean percentage of R1 was 23.47%) were significantly different compared with the remaining 13 local governments, As for West Tulang Bawang (D12), R1 (at13.38%) was not significantly different compared with South Lampung (D1); however, it was significantly different considering other 12 local governments. As for the remaining 12 governments, the R1 was not significantly different. The mean percentage of R1 for Bandar Lampung (D7) was 23.47%; it is the highest, suggesting that the dependency of Bandar Lampung on the central government is lower compared with

other local governments. The second highest R1was for West Tulang Bawang (D12), with the mean percentage at 13.38%, revealing that the dependency of West Tulang Bawang (D12) on central government was less compared with other 12 local governments, but not to Bandar Lampung (D7). For the remaining 12 local governments, the mean percentage of R1 was < 10%, and they were not significantly different (see Table 4); with a low degree of fiscal autonomy, these local governments are highly dependent on financial assistance from the central government.

Table 4.
Multiple Comparison of Districts, Tukey's Studentized Range (HSD) (Test for The R1 Critical Value of Studentized Rangeis 4.96.)

Districts	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14
D1	*0.57*	*4.41*	*3.49*	*1.36*	*4.86*	*−15.08**	*4.22*	*5.36*	*4.35*	*4.53*	*−4.99*	*3.02*	*3.96*
D2		*3.84*	*2.92*	*0.79*	*4.29*	*−15.66**	*3.65*	*4.79*	*3.77*	*3.96*	*−5.56**	*2.44*	*3.38*
D3			*−0.92*	*−3.05*	*0.44*	*−19.50**	*−0.18*	*0.95*	*−0.06*	*0.12*	*−9.40**	*−1.30*	*−0.45*
D4				*−2.13*	*1.36*	*−18.58**	*0.73*	*1.87*	*0.85*	*1.04*	*−8.48**	*−0.47*	*0.46*
D5					*3.50*	*−16.45**	*2.86*	*4.00*	*2.98*	*3.17*	*−6.35**	*1.65*	*2.59*
D6						*−19.95**	*−0.63*	*0.50*	*−0.51*	*−0.32*	*−9.85**	*−1.84*	*−0.90*
D7							*19.31**	*20.4**	*19.4**	*19.62**	*10.09**	*18.11**	*19.05**
D8								*1.13*	*0,12*	*0.31*	*−9.22**	*−1.21*	*−0.27*
D9									*−1.02*	*−0.83*	*−10.36**	*−2.35*	*−1.41*
D10										*0.18*	*−9.34**	*−1.33*	*−0.39*
D11											*−9.53**	*−1.52*	*−0.58*
D12												*8.01**	*8.95**
D13													*0.94*

Note: NS,nonsignificant, *,significant at alpha = 0.05, Di, I = 1,2,3, …, 14 are local governments, where D1 is South Lampung, D2 Metro, D3Tanggamus, D4 East Lampung, D5 Pringsewu, D6 Tulang Bawang, D7 Bandar Lampung, D8West Lampung, D9 Pesisir Barat, D10Mesuji, D11 Pesawaran, D12West Tulang Bawang, D13 Middle Lampung, and D14 North Lampung.

Comparison ratio of routine expenditure index (R2)

Model (8) for analysis of routine expenditure index (R2), the results of analysis of variance the model is very significant with p-value <0.0001 (Table 5). R-squares= 0.8743. This means that 87.43% of the variation of the routine expenditure index (R2) can be accounted for by the model. Table 6. shows the results of testing the null hypothesis that the degrees of routine expenditure index

(R2) among the 14 districts in Lampung are equal, and this null hypothesis is rejected with p-value <0.0001.

Table 5.
Analysis of Variance Used in Testing The Model Ratio of Routine Expenditure Index (R2) Across 14 Local Governments

Source	DF	Sum of Squares	Mean Square	F-Value	P-value
Model	13	3858.771401	296.828569	29.43	<.0001
Error	55	554.774915	10.086817		
Corrected Total	68	4413.546316			

R-Squares = 0.8743

Figure 3.
Box Plot of Comparison of Routine Expenditure Index (R2) for 14 Local Governments in Lampung

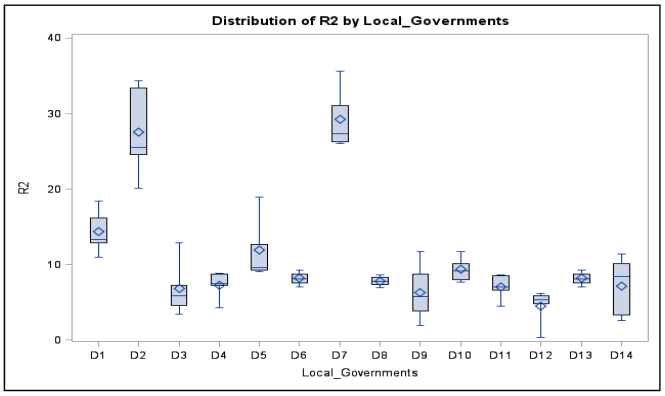


Figure 3 shows that 14 local governments in Lampung showed an increase in LRG over the 5-year period from 2013 to 2017; however, the total routine expenditures also showed an increasing trend, so the ratio was very low. From 14 local governments in Lampung, Bandar Lampung (D7) and Metro (D2) had a routine expenditure index (R2) lower than the 12 remaining local governments.

Table 6.
Multiple Comparison of Districts, Tukey's Studentized Range (HSD) test for routine expenditures index (R2) (Critical value of the studentized range is 4.96.)

Local Gov.	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14
D1	*−13.25**	*7.55**	*7.05**	*2.46*	*6.19**	*−14.94**	*6.54**	*8.06**	*5.00**	*7.29**	*9.82**	*6.19**	*7.18**
D2		*20.80**	*20.29**	*15.70**	*19.44**	*−1.69*	*19.79**	*21.31**	*18.25**	*20.54**	*23.07**	*19.44**	*20.43**
D3			*−0.50*^{NS}	*−5.09**	*−1.36*	*−22.49**	*−1.01*	*0.51*	*−2.55*	*0.26*	*2.27*	*−1.36*	*−0.37*
D4				*−4.59*	*−0.86*	*−21.96**	*−0.51*	*1.02*	*−2.05*	*0.25*	*2.77*	*−0.86*	*0.14*
D5					*3.73*	*−17.39**	*4.08*	*5.61**	*2.54*	*4.84*	*7.36**	*3.73*	*4.73*
D6						*−21.13**	*0.35*	*1.88*	*−1.19*	*1.11*	*3.63*	*0.00*	*0.99*
D7							*21.48**	*23.00**	*19.94**	*22.23**	*24.76**	*21.13**	*22.12**
D8								*1.53*	*−1.54*	*0.75*	*3.28*	*−0.35*	*0.64*
D9									*−3.06*	*−0.77*	*1.75*	*−1.88*	*−0.88*
D10										*2.29*	*4.82*	*1.88*	*2.18*
D11											*2.52*	*−1.11*	*−0.11*
D12												*−3.63*	*−2.63*
D13													*0.99*

Note: NS, nonsignificant; *, significant at alpha = 0.05; Di, i =1,2,3, …, 14 are local governments, where D1 is South Lampung, D2 Metro, D3 Tanggamus, D4 East Lampung, D5 Pringsewu, D6 Tulang Bawang, D7 Bandar Lampung, D8 West Lampung, D9 West Pesisir, D10 Mesuji, D11 Pesawaran, D12 West Tulang Bawang, D13 Middle Lampung,and D14 North Lampung.

Multiple comparisons of Turkey's studentized range test (Table 6) showed that the routine expenditure index (R2) of local government Bandar Lampung (D7) was the highest (mean percentage at 29.28%), and it is significantly different than the other 13 local governments in Lampung. Metro (D2) had the second highest R2 (mean percentage at 27.60%), and it is significantly different from the other 12 local governments, but not from Bandar Lampung (D7); South Lampung (D1) had the third highest R2 (mean percentage at 14.34%), and it differs significantly from other 13 local governments. The local government of Tanggamus (D3) is significantly different from Pringsewu (D5). The local government of Pringsewu (D5) (mean percentage R2 at 11.89%) differed significantly from West Pesisir (D9) and West Tulang Bawang (D12). The local governments of Tanggamus (D3), East Lampung (D4), Tulang Bawang (D6), West Lampung (D8), West Pesisir (D9), Mesuji (D10),

Pesawaran (D11), West Tulang Bawang (D12), Middle Lampung (D13), and North Lampung (D14) did not differ significantly.

Comparison of Regional Financial Capability (R3) of local governments in Lampung

Model (8) for analysis of Regional Financial Capability (R3) The results of the analysis of variance in the model are very significant, with a p-value <0.0001 (Table 8). R-squares= 0.9300. This means that 93.00% of the variation of the Regional Financial Capability (R3) can be accounted for by the model. Table 7. shows the results of testing the null hypothesis that the degrees of Regional Financial Capability (R3) among the 14 districts in Lampung are equal, and the null hypothesis is rejected with p-value <0.0001. Therefore, the degrees of Regional Financial Capability (R3) in Lampung in at least one of the districts are different from the others.

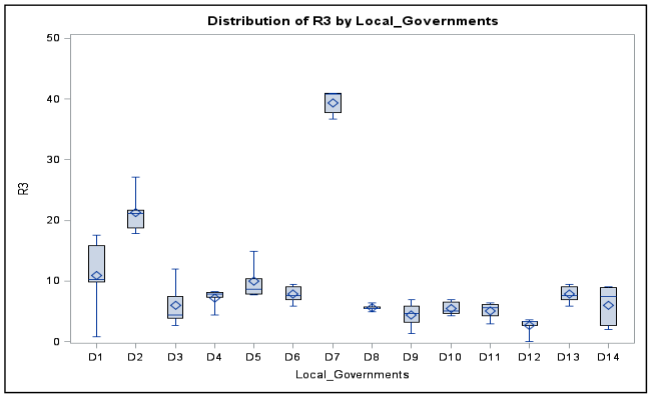
Table 7.
Analysis of Variance Used in Testing The Model Ratio of Regional Financial Capability (R3) Across 14 Local Governments

Source	DF	Sum of Squares	Mean Square	F-Value	Pr > F
Local Gov	13	5945.696828	457.361294	56.22	<.0001
Error	55	447.444155	8.135348		
Corrected Total	68	6393.140983			

R-Squares=0.9300

To explain the regional financial capability of local governments by comparing LGR and General Allocation Fund (GAF), Special Allocation Fund (SAF), and other income.

Figure 4.
Box Plot of Regional Financial Capability (R3) of The 14 Local Governments in Lampung



The financial autonomy of local governments indicates their level of ability to self-funded activities, development, and services for the people who live there and pay tax and retribution as a source of local government income.

For the 14 local governments in Lampung, the level of financial autonomy (or independence) is very low, as shown in Figure 4. In Bandar Lampung, the level of financial autonomy is higher compared with the other 13 local governments. Figure 4 shows 14 local governments in Lampung during the 2013–2017 fiscal period as being highly dependent on central government assistance through equalization funds, or the role of the central government was more dominant than the independence of local governments. The low independence ratio shows that the source of regional revenue is still not optimal. This is due to the relative lack of LGR that can be explored by local governments, while for a sizable tax, it is still managed by the central government, which is collected under the law/government requirements, and the local governments only run and receive a share in the form of balance funds comprising tax/non-tax revenue sharing, General Allocation Fund (GAF), Special Allocation Fund (SAF), and provincial assistance. The initiative, creativity, and regional willingness are required for the low independence ratio, which shows that the source of regional revenue is still not optimal. This is due to the relative lack of LGR that can be explored by local governments, while for a sizable tax, it is still managed by the central government, which is collected under the law or government requirements, and the local governments only run and receive a share in the form of balance funds consisting of tax or non-tax revenue

sharing, General Allocation Fund (GAF), Special Allocation Fund (SAF), and provincial assistance.

Table 8.
Multiple Comparison of Districts Using Tukey's Studentized Range (HSD) Test for (R3) (Critical Value of Studentized Rangeis 4.96.) n

Local Gov.	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14
D1	*−10.41**	*4.83*	*3.69*	*0.94*	*3.07*	*−28.53**	*5.29**	*6.83**	*5.38**	*5.79**	*8.26**	*3.07*	*4.85*
D2		*15.24**	*14.10**	*11.35**	*13.48**	*−18.12**	*15.70**	*17.24**	*15.79**	*16.21**	*18.67**	*13.48**	*15.26**
D3			*−1.14*^{NS}	*−3.88*	*−1.75*	*−33.36**	*−0.46*	*1.99*	*0.55*	*0.97*	*3.44*	*−1.75*	*0.03*
D4				*−2.75*	*−0.61*	*−32.22**	*1.60*	*3.14*	*1.69*	*2.11*	*4.57*	*−0.62*	*1.16*
D5					*2.13*	*−29.48**	*4.35*	*5.88**	*4.44*	*4.85*	*7.32**	*2.13*	*3.91*
D6						*−31.61**	*2.21*	*3.75*	*2.31*	*2.72*	*5.19**	*0.00*	*1.78*
D7							*33.83**	*35.36**	*33.92**	*34.33**	*36.80**	*31.61**	*33.39**
D8								*1.54*	*0.09*	*0.51*	*2.97*	*−2.22*	*−0.44*
D9									*−1.45*	*−1.03*	*1.44*	*−3.75*	*−1.97*
D10										*0.42*	*2.88*	*−2.31*	*−0.53*
D11											*2.47*	*−2.72*	*−0.94*
D12												*−5.19**	*−3.41*
D13													*1.78*

Note: NS, nonsignificant, *, significant at alpha = 0.05, Di, i = 1,2,3, …, 14 are local governments, where D1is South Lampung, D2 Metro, D3 Tanggamus, D4 East Lampung, D5 Pringsewu, D6 Tulang Bawang, D7 Bandar Lampung, D8 West Lampung, D9 Pesisir Barat, D10 Mesuji, D11 Pesawaran, D12 West Tulang Bawang, D13 Middle Lampung, D14 North Lampung.

The results of the analysis conducted using the multiple comparison Turkey's studentized range test (Table 8) show that the regional financial capability(R3) of local government Bandar Lampung (D7) was the highest (mean percentage at 39.92%), and it differs significantly from other 13 local governments in Lampung. The second highest in R3 was Metro(D2) (mean percentage at 21.29%), and it is significantly different from the other 13 local governments. South Lampung (D1) was the third highest R3, with the mean percentage of R3 at10.88%, being significantly different from Metro (D3), Bandar Lampung(D7), West Lampung (D8), West Pesisir (D9), Mesuji (D10), Pesawaran (D11), and West Tulang Bawang (D12). Pringsewu (D5) was the fourth largest, with a mean percentage of 9.94%, and it is significantly different from Metro (D2), Bandar Lampung (D7), West Pesisir (D9), and West Tulang Bawang (D12). Other ten local governments, Tanggamus (D3), East Lampung (D4), Tulang Bawang (D6), West Lampung (D8), Pesisir Barat (D9), Mesuji (D10), Pesawaran (D11), West Tulang

Bawang (D12), Middle Lampung (D13), and North Lampung (D14), were not significantly different.

Implications of Regional Income Dependence on the Sustainability of Regional Autonomy: A Public Interest Perspective

The analysis of the financial capability of local government and its implications for the sustainability of regional autonomy from the perspective of community interests is an important approach to understanding how the fiscal policies of local government can affect the welfare of the community.

Based on the results of the analysis over five years, from 2013 to 2017, 14 regional governments, except for the City of Bandar Lampung, did not experience significant changes in the increase of Regional Original Revenue (PAD) and other regional income. This indicated the presence of structural problems that hinder the increase in PAD because strategic tax sources are absorbed by central taxes.

Furthermore, the model of regional dependence on the central government will impact the implementation of sustainable regional autonomy, implying that regions will not achieve financial independence. As a result, the process of seeking funds from the central government becomes the main source of reliance for regions to carry out development functions and public services.

The model of regional dependence on the central government will have a negative impact as it does not encourage the sustainability of regional self-sufficiency. The financial capacity of regional governments refers to their capacity to manage their own finances, including revenue, expenditure, and investment. The sustainability of regional autonomy reflects the extent to which regional governments can maintain their autonomy in financial decision-making and public policies. Therefore, the sources of PAD, especially from the tax sector collected by the central government, need to be evaluated because regions will not experience an increase in PAD if the taxes collected by the central government are not reformed, namely income tax, state income tax, luxury goods sales tax, stamp duty tax, land and building tax, plantation tax, forestry tax, and mining tax.

. From the perspective of public interest, it is crucial to focus on it because the local government's financial policies will directly impact the daily lives of the society. If the local government's finances are insufficient, it will result in budget constraints for essential public services such as education, healthcare, infrastructure, and others. The interests of the community can experience these negative impacts in the form of decreased service quality or an increase in local revenue burdens imposed on the community.

CONCLUSION

In this study, the analysis of the financial condition of the regions in 14 districts/cities in Lampung Province revealed that when compared to the amount of assistance provided by the central government, the finances of the regions in 14 districts/cities in Lampung Province during the last five years (2013-2017) tend to be low. This was caused by the lack of increase in regional income from their own sources (PAD/local revenue) and the amount of routine expenses that must be incurred to pay for employee expenditures. The region's dependence on the central government will continue because of structural issues that prevent the region from developing independently, especially in terms of fiscal capacity. This dependence model will have an impact on development inequalities among districts/cities in Lampung because the tax and levy sectors are more positively correlated in urban areas than in rural areas. Furthermore, the region's dependence model on the central government will have negative consequences as it does not encourage the sustainability of regional self-sufficiency. In this context, from the perspective of public interests, local government financial policies will directly impact people's daily lives. If local government finances are limited or insufficient, it can result in budget constraints for essential public services such as education, health, infrastructure, and others. People may experience the negative impact of this in the form of declining service quality or an increase in local revenue imposed on society.

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