

# Financial Sustainability and Financial Performance of Local Government at East Kalimantan

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Abstract— This study aims to determine and analysis Financial Sustainability, Trend Financial Sustainability, Map of Financial Performance and Financial Performance of city/regency (local governments) in East Kalimantan in 2015-2019. The benefit of this research is that it becomes input for local governments and provincial governments in making policies related to APBD. The analysis tool uses the calculation of financial sustainability, financial sustainability trends, quadrant methods, financial performance which consists of the calculation of growth, share, elasticity, index X, IKK. This study also maps the performance of the LGR based on the Quadrant Method. The results of this study indicate that there are 5 cities/regencies that have financial sustainability above the average and 5 cities/regencies whose values are below the average. For 5 years, Trend Financial Sustainability has grown, from a value of 40.77%, 36.45%, 29.07%. In 2018 it increased by a value of 47.34%, then in 2019 it decreased again by 36.72%. LGR performance map using the Quadrant Method, there are no cities/regencies in East Kalimantan Province that are included in Quadrant 1 which is classified as ideal. In Quadrant 2 are East Kutai Regency, North Penajam Paser and Mahakam Ulu. The areas in this quadrant are considered not ideal. In Quadrant 3, there are four cities/regencies, Balikpapan City, Berau Regency, Samarinda and Bontang. In this Quadrant the group is not ideal. In bad condition, they are placed in Ouadrant 4. Its members are Kutai Kertanegara and West Kutai, and Paser Regencies.

Keywords— Financial performance, financial sustainability.

# I. INTRODUCTION

East Kalimantan is one of the four richest local governments in Indonesia, the others are Nanggroe Aceh Darussalam, Riau, and Papua. The provinces of Nanggroe Aceh Darussalam, East Kalimantan, and Riau with their natural oil and gas resources, while Papua Province is famous for its copper and gold. As natural resource producing regions, the four provinces receive transfer funds sourced from the central government in the form of a very large natural resources revenue sharing fund. The profit sharing fund has contributed significantly to the Regional Income and Expenditure Budget of the four provinces.

Financial sustainability is the government's long-term ability to consistently fulfill its financial responsibilities and identifies three types of pressures facing the government: cyclical, structural, and intergovernmental [1]. Cyclical pressures reflect the effect of business cycle on government finance and often occurs at all three levels of government. Structural pressures affecting financial sustainability include demographic changes, suburbanization trends, overall population and business mobility, structural changes from consumption of goods to consumption of services, and increasing new sources of income such as e-commerce.

Demands for good performance are often directed at local governments to increase their regional financial independence. To measure the level of success of a region in implementing regional autonomy, it is necessary to evaluate the financial performance management of local governments in Indonesia [2]. Measurement is a concept that describes the process for evaluating performance finances in accordance with a set of rules [3]. Financial performance measurement aims to increase local government accountability. Furthermore, the measurement of the government's financial performance will be useful in the process of making policies regarding regional financial management.

Analysis on financial ratios is one of the financial performance analysis tools, generally for assessing profitoriented organizations or organizational performance. However, this is rarely done in non-profit organizations or institutions, especially local governments. This is because the presentation of local government financial reports has different limitations and characteristics and scope. According to [4], the preparation of the Regional Income and Expenditure Budget is based on the principle of balance in the supplementary budget where each income and expenditure group is calculated by increasing a certain percentage (based on the inflation rate) which ignores financial ratios. With financial ratios, the quality of financial reports audited is expected to improve, so that the public society can also find out about conditions that reflect regional financial conditions.

Financial performance analysis is an attempt to identify financial characteristics based on the presentation of financial statements. Regional financial performance can be seen from various financial ratios, which analysis is the Regional Income and Expenditure Budget. It is used as a benchmark for evaluating regional financial performance. Financial ratio analysis to Regional Income and Expenditure Budgetary comparing the results achieved by an area in one period with the previous period, to determine trends that occur. Regional financial performance analysis is expected to be a measurement tool for evaluating regional financial independence in appreciating the implementation of fiscal decentralization policies, and for reviewing growth and development of revenues and expenditures within a certain period.

Research conducted by [5] found 8 cities/regencies in East Kalimantan have low Z-score Financial Independence. Cities/regencies governments still have a very high



dependence on transfer funds from the central government. Development financing originating from the transfer of revenue-sharing from natural resources has an environmental, social and economic impact that is unsustainable.

This research is the development of research conducted by [5]. This research will analysis more specifically the trend of financial sustainability, financial performance, and the financial ability index for the case of cities/regencies in East Kalimantan.

# II. LITERATUR REVIEW

Financial sustainability can be defined as the ability of the government to finance the provision of current public services without reducing the ability to do so in the future [6], [7], [8]. Financial sustainability is defined as a type of financial condition that enables the government to continue providing current services and in the future without disrupting income or expenditure patterns. Assessment of local financial sustainability is based on three types of indicators: funding the pension obligations, debt burden, and budget balance. Three main factors influence the long-term financial structure and performance, and the local economic base [9].

The study of [10] analysis financial performance in terms of own income collection and the sustainability of local cities in South Africa. Criteria such as gross value added, income collected from own sources, number of debtors owed, age of debt and dependence on grants are considered. The conclusion is that a large number of cities do not meet the requirement that current reasonable amounts of expenditure must be financed by their own resources.

The other research is conducted by [11] analysis the sources of income for the City of Shabestar in terms of financial sustainability during 2004-2014. The results of this research found that the trend of regency financial independence and decentralization of local authorities experienced several problems and cities needed financial support from the central government to fulfill their obligations. Shabestar Municipality like many other cities in Iran is heavily dependent on a profitable and unsustainable source of income such as the sale of the city's immovable property, charges on surplus density, fees for removing parking, and others.

Financial performance analysis in cities/regencies at Bali Province conducted by [12]. The research use mapping of regional original income, financial capacity index, level of regional independence, level of regional interdependence, and map of regional financial capacity. Based on the analysis, Badung Regency and Gianyar Regency were found to be in ideal conditions. Financial independence is categorized as low independence and high interdependence on the central government. Mapping of regional financial capacity shows that the regions with a level of independence above average and a level of interdependence below the average are Badung Regency, Gianyar Regency, and Denpasar Regency.

According to [12], with the principles of good regional financial management, which prioritizes the principles of accountability, transparency and participation, local

governments are required to have good financial performance in managing their budgets. In order for regional financial performance to be good, an evaluation of regional financial performance in managing its finances needs to be done. Measurement of financial performance has many objectives, among others, to increase the accountability of local governments. Furthermore, the measurement of regional financial performance will also be useful in the process of making policies regarding regional financial management.

# III. RESEARCH METHODS

The variables to be measured in this study are financial sustainability, financial sustainability's trend, and financial performance. The variables in this study are proxied by the ratio of capital expenditure to compulsory expenditure, growth of LGR (locally generated revenue), share, elasticity, index x, and financial capability index.

After calculating and seeing the trend of increasing and decreasing for 5 years, then the financial performance mapping was carried out using the quadrant method using the naming of city/regency groups according to [13]. LGR performance mapping is used to determine the position of cities/regencies in East Kalimantan Province as measured by LGR growth, and their contribution to total expenditure. Financial capacity index (FAI) is used to measure financial capability.

#### IV. FINDINGS RESEARCH / RESULTS

# Financial Sustainability

Fiscal sustainability is quality government spending. Government spending is directed towards spending that can increase productivity, such as infrastructure development. The calculation of financial sustainability trend is obtained from the ratio between capital expenditures and compulsory expenditure. The results of financial sustainability calculation are presented in the table 1:

		% Finar	icial Susta	iinability	nability			
City / Regency	Year					Avera		
	2015	2016	2017	2018	2019	ge		
Berau	36.82	37.08	22.53	51.43	40.08	37.59		
Kutai Kartanegara	37.21	30.05	17.97	30.46	22.14	27.57		
West Kutai	48.64	41.15	34.11	55.14	24.83	40.77		
East Kutai	41.35	43.23	38.50	46.92	31.22	40.25		
Paser	38.27	31.31	23.75	49.35	29.30	34.40		
Balikpapan	39.30	35.98	24.83	48.45	26.77	35.07		
Bontang	34.42	35.66	23.03	41.18	29.96	32.85		
Samarinda	37.01	35.71	29.30	47.67	33.94	36.73		
North Penajam Paser	48.30	31.75	42.65	70.70	35.49	45.78		
Mahakam Ulu	46.39	42.62	34.02	32.10	26.10	36.25		
Average	40.77 %	36.45 %	29.07 %	47.34 %	29.98 %	36.72 %		

TABLE 1. Results of Financial Sustainability Calculation

The average financial sustainability of cities/regencies in East Kalimantan for five years is 36.72%. There are 5 cities/regencies that are above the average (North Penajam Paser, West Kutai, East Kutai, Berau, and Samarinda). There are 5 cities/regencies that are below the average value for 5



years, Mahakam Ulu, Balikpapan, Paser, Bontang, and Kutai Kartanegara.

#### Financial Sustainability Trend

The calculation of the financial sustainability trend is to see the increase and decrease in financial sustainability in 2015-2019. It can be seen in table 1 that the cities and regencies as a whole from 2015 to 2017 have decreased the value of the financial sustainability ratio (the ratio of capital expenditure to mandatory expenditure). In 2018 it has increased in all cities/regencies, then in 2019 it has decreased again. The downward trend in financial sustainability shown in figure 1 below:



Fig. 1. Graph of Financial Sustainability Trend

Financial sustainability trend from 2015-2017 has decreased from 40.77% to 36.45% and 29.07%. In 2018 it increased at 47.34%, then in 2019 it decreased again at 36.72%.

# Growth Calculation

The calculation of LDR growth for cities/regencies in East Kalimantan for 2015-2019 is shown in table 2:

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TABLE 2. Growth of LGR							
City /		Averag					
City /		Year					
Regency	2015	2016	2017	2018	2019	e	
Berau	14.39	-13.75	23.01	-12.15	8.70	4.04	
Kutai Kartanegara	-25.87	49.50	-24.37	14.28	23.09	7.33	
West Kutai	0.00	33.06	13.37	-24.21	26.54	9.75	
East Kutai	1.10	-2.17	13.91	84.62	29.65	25.42	
Paser	-2.96	21.87	5.76	9.91	9.28	8.77	
Balikpapan	9.47	10.35	10.03	5.19	0.70	7.15	
Bontang	11.75	8.46	1.54	13.74	8.97	8.89	
Samarinda	8.72	10.94	0.57	-12.37	11.69	3.91	
North Penajam Paser	3.85	71.08	0.00	8.96	-10.60	14.66	
Mahakam Ulu	-47.64	284.55	6.80	-21.85	0.00	44.37	
Average	- 2.72%	47.39 %	5.06 %	6.61 %	10.80 %	13.43%	

The average growth of cities/regencies LGR in East Kalimantan Province from 2015 to 2019 is 13.43%. This shows that within five years the LGR value was below the

average value. The data show that there is a fluctuating trend in LGR growth rates in almost all cities/regencies in East Kalimantan.

The trend of the average growth rate of LGR in cities/regencies in East Kalimantan during the last five years was the highers in Mahakam Ulu Regency (44.37%), East Kutai (25.42%), North Penajam Paser (14.66%), West Kutai (9.75%), Bontang (8.89%), Paser (8.77%), Kutai Kartanegara (7.33%), Balikpapan (7.15%), Berau (4.04%) and the lowest was Samarinda (3.91%).

# Share Calculation

The calculation of the share of cities/regencies in East Kalimantan in 2015-2019 is shown in table 3.

TABLE 3. Growth of Share							
	% Share Growth						
City / Regency		Average					
	2015	2016	2017	2018	2019		
Berau	6.66	8.19	10.73	12.15	8.07	9.16	
Kutai Kartanegara	5.64	4.18	10.59	8.36	7.38	7.23	
West Kutai	3.55	3.65	6.32	5.73	4.46	4.74	
East Kutai	2.41	2.02	2.99	3.08	4.69	3.04	
Paser	3.68	3.43	6.21	5.75	5.15	4.84	
Balikpapan	16.18	17.86	32.16	29.95	29.12	25.05	
Bontang	6.57	7.09	16.08	12.67	11.70	10.82	
Samarinda	12.68	14.77	21.51	22.64	16.42	17.61	
North Penajam Paser	3.43	4.92	7.72	8.42	8.62	6.62	
Mahakam Ulu	0.75	0.40	1.59	1.81	1.29	1.17	
Average	6.15	6.65	11.59	11.06	9.69	9.03	

The average share of cities/regencies in East Kalimantan from 2015-2019 was 9.03%. The average contribution of LGR to TE in cities/regencies in East Kalimantan during the last five years was the highest is Balikpapan (25.05%), followed by Samarinda (17.61%), Bontang (10.82%), Berau (9.16%), Kutai Kartanegara (7.23%), North Penajam Paser (6.62%), Paser (4.84%), West Kutai (4.74%), East Kutai (3.04%), and the lowest is Mahakam Ulu (1.17%).

Based on the growth of LGR and the contribution of LGR to TE, the performance of LGR using the quadrant method is shown in figure 2.

	Growth A	verage	
	Quadrant 2	Quadrant 1	
	Growth = High Share = Low	Growth = High Share = High	
Share	Kabupaten Kutai Timur Kabupaten Penajam Paser Utara Kabupaten Mahakam Hulu	-	Share
Average	Quadrant 4	Quadrant 3	Average
	Growth = Low Share = Low	Growth = Low Share = High	
	Kabupaten Kutai Kertanegara Kabupaten Kutai Barat Kabupaten Paser	Kota Balikpapan Kabupaten Berau Kota Bontang Kota Samarinda	
	Growth A	verage	

Fig. 2. Map of LGR Performance Using Quadrant



Based on the LGR performance map in Figure 2, it is known that there are no regencies/cities in East Kalimantan Province that are included in Quadrant 1. The category of Quadrant 1 is classified as ideal. Cities/regencies that are included in quadrant 1 have an above average LGR growth category and their LGR has a big role in TE. Cities/regencies in Quadrant 1 have the ability to develop local economic potential. Cities/regencies in Quadrant 1 are more flexible in budgeting their regional spending. Local governments are able to meet financial obligations and services to the community [14].

The areas in Quadrant 2 are East Kutai regency, North Penajam Paser regency, and Mahakam Ulu regency. The areas in this quadrant are considered not ideal, but these areas have the ability to develop local economic potentials so that there is a possibility that LGR will later play a major role in TE. LGR's contribution to TE is still low, but LGR's growth is high.

The LGR growth of East Kutai Regency during the last five years was 25.42% higher than the mean value. The contribution of LGR to TE was 3.04% lower than the mean value. It can be concluded that East Kutai Regency is in a condition that is not yet ideal. The percentage of LGR growth in North Penajam Paser Regency during the last five years was 14.66% higher than the mean value, but the contribution of LGR to TE of North Penajam Paser Regency was 6.62% lower than the mean value. It can be concluded that North Penajam Paser Regency is considered to be in a less than ideal condition. Mahakam Ulu Regency is also in a non-ideal condition based on the results of the analysis which shows that the growth of LGR during the last five years is 44.37% higher than the mean value, and the contribution of LGR to TE is 1.17% lower than the mean value.

In Quadrant 4 there are three cities/regencies (Balikpapan, Berau, Samarinda, and Bontang). In this quadrant, this group is not ideal because the large contribution of LGR in TE can decrease, because of the low growth of LGR. In other words, LGR's contribution to TE is high, but LGR growth is low. The results of the analysis show that the percentage growth of the LGR of Balikpapan City, Berau Regency, Samarinda City and Bontang City during the last five years is lower than the mean value.

Areas that are in bad condition are placed in Quadrant 4. The results of the analysis show that the regions with low growth and the contribution of LGR to low TE are Kutai Kartanegara, West Kutai, and Paser Regencies. LGR's contribution to TE is low. During the last five years, the growth of LGR in Kutai Kartanegara Regency was 7.33% and the contribution of LGR to TE was 7.22%. These two values are classified as low when compared to the mean value, thus West Kutai Regency is not in an ideal condition. West Kutai Regency has an LGR growth of 9.75% and the contribution of LGR to TE over the last five years is 4.74%. Both values are lower than the mean.

## Financial Capacity Index (FAI) Calculation

Financial capacity index (FAI) aims to determine the

financial capacity of cities/regencies with the criteria of financial capacity using [15].

No	City / Regency	Growth Index	Share Index	Elasticity Index	FAI
1	Berau	-0.40	0.33	0.75	0.23
2	Kutai Kartanegara	-0.37	0.25	0.51	0.13
3	West Kutai	-0.35	0.15	0.15	-0.02
4	East Kutai	-0.19	0.08	0.00	-0.04
5	Paser	-0.36	0.15	0.65	0.15
6	Balikpapan	-0.37	1.00	0.70	0.44
7	Bontang	-0.35	0.40	0.69	0.25
8	Samarinda	-0.40	0.69	0.65	0.31
9	North Penajam Paser	-0.30	0.23	1.00	0.31
10	Mahakam Ulu	0.00	0.00	0.19	0.06
	Average	-0.31	0.33	0.53	0.18

TABLE 4. Financial Capacity Index

The average FAI of cities/regencies in East Kalimantan from 2015 to 2019 was 0.18. This figure is classified as low, this indicates that the cities/regencies in East Kalimantan Province do not yet have the financial capacity that is not yet good enough to fund regional development. The highest average FAI over the last five years was Balikpapan (0.44), followerd by Samarinda (0.31) and North Penajam Paser (0.31), Bontang (0.25), Berau (0.23), Paser (0.15), Kutai Kartanegara (0.13), Mahakam Ulu (0.06), West Kutai (-0.02), and Finally East Kutai (-0.04).

#### V. CONCLUSION

The conclusion is written with the following conditions:

- 1. Financial sustainability of cities/regencies in East Kalimantan for five years in an average of 36.72%. There are 5 cities/regencies that are above the average (North Penajam Paser, West Kutai, East Kutai, Berau, and Samarinda) and there are 5 cities/regencies that are below the average (Mahakam Ulu, Balikpapan, Paser, Bontang and Kutai Kartanegara).
- 2. Financial sustainability trend from 2015 to 2017 has decreased, in 2018 increased, then in 2019 decreased again.
- 3. The results of financial mapping using the Quadrant Method show that there are no regencies/cities in East Kalimantan in Quadrant 1 (the ideal group). Regencies/cities in East Kalimantan are in Quadrant 2 and Quadrant 3 (not ideal), and Quadrant 4 (bad).
- 4. Financial Ability Index (FAI) of cities/regencies in East Kalimantan from 2015 to 2019 is 0.18. This figure is classified as low, this shows that the cities/regencies in East Kalimantan do not yet have the financial capacity that is not yet good enough to fund regional development.

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# REFERENCES

- Chapman, J.I. "State and Local Financial Sustainability: The Callenges," Public Administration Review, vol.68, no.1, pp.115-131. 2008
- [2] Mardiasmo. "Akuntansi Sektor Publik," Yogyakarta: Andi. 2005.



- [3] Dicker, James. "How Should We Measure Public Sector Performance?," Viewpoint Paper. 2010
- [4] Widodo, Joko. Good Governance: Telaah dari Dimensi Akuntabilitas dan Kontrol Birokrasi pada Era Desentralisasi dan Otonomi Daerah. Surabaya: Insan Cendekia. 2001
- [5] Kadafi, Muhammad., Amirudin, "Memprediksi Financial Distress (Bukti Empiris Kabupaten/Kota di Indonesia", Seminar Nasional Terapan Riset inovatif, pp 72-80, Sep. 26, 2020.
- [6] CICA, "Indicators of Government Financial Condition", Toronto, Canadian Institute of Chartered Accountants, Toronto, 1997.
- [7] Bath, P., "Resource for Success Series". 2nd ed. Virginia: USA Nature Conservancy Arlington, 2001.
- [8] Stavins, R., Wagner, A. & Wagner, G., "Interpreting Sustainability in Economic Terms: Dynamic Efficiency plus Intergenerational Equity, Economics Letters," vol. 79, no. 3, pp. 339–343, 2003.
- [9] Gorina, E. "Financial Sustainability of Local Governments: Effects of Government Structure, Revenue Diversity, and Local Economic Base", Doctoral dissertation (Tempe: Arizona State University). 2013.
- [10] Schoeman. N. "Financial Performance and Sustainability of Local Government in South Africa – An Empirical Analysis," No.201104, Pretoria: University of Pretoria. 2011

- [11] Hajilou, Mahran, Mirehei Mohammad, Amirian, Sohrab, Pilehvar Mehdi. "Financial Sustainability of Municipalities and Local Governments in Small-Sized Cities: a Case of Shabestar Municipality," Lex Localis – Journal of Local Self-Government, vol.16, no.1, pp.77-106, January 2018.
- [12] Purba, Ida Bagus Agung Haridharma., Mimba, Ni Putu Sri Harta. "Analysis on the Regional Financial Performance of Regencies/Cities in Bali Province", Journal Of Humanities And Social Science, Vol 24, Issue 1, pp 20-33. 2019.
- [13] Basri, Hasan, Syaparuddin, Junaidi. "Pemetaan Kinerja Pendapatan Asli Daerah dan Kemampuan Keuangan Daerah Kabupaten/Kota di Provinsi Jambi", Jurnal Perspektif Pembiayaan dan Pembangunan Daerah, vol. 1, no.2, pp 81-90. 2013.
- [14] Rivenbark, W.C., Roenigk, D.J. & Allison, G.S. "Conceptualizing Financial Condition in Local Government", Journal of Public Budgeting, Accounting & Financial Management, vol. 22, pp. 149-177. 2010.
- [15] Hidayat, M., Hadi, M.F., Widiarsih, D. "Analisis Kemampuan Keuangan Kabupaten/Kota di Provinsi Sumatera Barat dalam Era Otonomi Daerah", Jurnal Sungkai, vol. 4, no. 2, pp 36-55. 2016.

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