

## Research Article

# The Role of Financial and Non-financial Performance of Local Governments in Enhancing Regional Autonomy in Indonesia

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## Abstract.

Regional autonomy is a crucial factor that can support the financial sustainability of local governments. This research aims to assess how financial and non-financial performance influence regional autonomy in Indonesia. Through purposive sampling, data were gathered from Indonesian Local Governments between 2016 and 2018, resulting in a sample size of 1555 observations. Multiple linear regression was used for Hypothesis testing. The findings of this research suggest that both the financial and non-financial performance of local governments play a positive role in enhancing regional autonomy. Local governments that have high-quality financial reporting and good governance performance tend to have a higher level of regional autonomy, compared to those with poor-quality financial reports and governance performance. This is inherently connected to the effectiveness in managing local own source revenue (PAD) and is reinforced by strong public confidence and engagement in tax payment and regional retributions, as well as other PAD sources. The findings of this study have implications for the importance of improving the quality of financial management and the administration of local government functions to increase regional autonomy and simultaneously realize the financial sustainability of local governments. Therefore, local governments should manage resources efficiently, transparently, and accountably.

**Keywords:** performance, financial management, implementation of regional government functions, regional autonomy

## 1. Introduction

The aims of instituting regional autonomy and fiscal decentralization as outlined in Law no. 32 of 2004 concerning Regional Government are to bolster regional self-reliance and diminish the fiscal reliance of regional governments on the central government. Economic life that experiences improvement every year will create positive economic growth [1]. This condition will trigger an increase in people's income, and an increase in income will encourage people's awareness to pay taxes and levies so that local original income (PAD) will also increase which will lead to achieving regional independence. Regional governments are required to strengthen their ability to increase PAD and

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carry out more accountable and transparent financial and non-financial management [2]. In regional autonomy, there are two aspects, namely financial performance and non-financial performance which are required to carry out their roles well [3].

The financial performance of regional governments refers to the extent of accomplishment in managing finances within the region, encompassing both revenue generation and expenditure, as measured by financial metrics established through policies or legal regulations over a single budget cycle. This form of performance is contained in the regional head's accountability report in the form of the regional government financial report (LKPD) [4]. Financial performance has a crucial role in determining regional independence. Refers to the ability of a region to manage its own financial resources, make budget decisions and implement programs and policies without excessive dependence on the central government and other external parties [5]. Thus, good and sustainable financial performance at the regional level allows these regions to have greater fiscal independence, enabling them to more effectively address their local needs and priorities. Meanwhile, non-financial factors also play a role in achieving regional independence. The non-financial performance referred to is aspects such as governance, public services and infrastructure development, where all these aspects will be evaluated through evaluating the performance of regional government implementation [6]. Thus, the implementation of good non-financial governance not only improves people's quality of life but also helps strengthen the regional economic foundation, both of which are important for achieving and maintaining fiscal independence.

Regional independence is a concept that aims to empower local communities and increase the efficiency and effectiveness of government. Therefore, local governments must improve financial performance and non-financial performance such as financial accountability. In this regard, research has developed that analyzes the extent to which government financial performance and the effectiveness of government implementation influence increasing regional independence. Several related studies conducted by Herawati et al. [7] and Pratiwi et al. [8] however, previous research has been limited to analyzing the impact of financial and non-financial performance on regional competitiveness and public sector performance achievements. Research conducted by El-Chaarani et al. [9] also indicates that good governance is supported by effective and efficient financial performance. There has been no research that uses financial and non-financial factors on regional independence. Therefore, this research aims to analyze in depth how financial performance as measured using BPK opinions and non-financial performance as measured using regional government performance evaluations play a direct role in efforts to increase regional independence.

Based on the data used in this research, several findings were obtained. First, financial performance has a positive effect on increasing regional independence. Regional governments that receive WTP opinions have a high level of regional independence. If previous research only analyzed how financial performance influences public sector performance, the novelty of this research is using financial performance as a factor that influences increasing regional independence. The results of this research contribute to research conducted by Herawati et al. [7] and Pratiwi et al. [8] that good financial performance reflects a region's ability to generate income and manage its budget effectively, which can increase regional independence. Second, non-financial performance has a positive effect on increasing regional independence. Regional governments that have high government implementation evaluation scores also have a high level of regional independence. If previous research only analyzed non-financial performance which had an impact on the level of regional competitiveness, then the uniqueness of this research in examining the latest variable, namely non-financial performance, which impacts the enhancement of regional autonomy. The findings of this research provide additional insights into the study conducted by El-Chaarani et al. [9] indicating that non-financial performance provides an overview of the effectiveness of regions in aspects such as the quality of public services, citizen satisfaction, and governance management. However, this study is limited to analyzing only financial and non-financial performance, suggesting that future research should explore additional variables such as the quality of public services and extend the observation period. The subsequent sections of the article will be structured into four segments: the second section will address the literature review and hypothesis formulation, the third section will detail the research methodologies employed, the fourth section will showcase the outcomes of hypothesis testing, and lastly, the fifth section will offer conclusions, discuss the research findings' implications, as well as address limitations and propose future research directions.

## 2. Material and Methods

### 2.1. The role of financial performance in regional independence

Based on previous studies, regional financial performance refers to the degree of achievement of work results within the realm of regional finance, covering regional income and expenditures. This is measured through financial indicators stipulated by policies or statutory provisions over a single budgetary period [10-20]. Financial performance is an important indicator to evaluate how efficient a region is in managing

its resources and acting with accountability. Regional independence is defined as the ability of a region to be independent in managing and using its resources without being too dependent on other parties, for example, the central government [21]. A region that shows impressive financial performance is usually indicated by its increasing economic prosperity. If the area has a solid financial foundation, then progress in various fields and the quality of life of its citizens will continue to grow. According to Ratang [5], financial performance has a crucial role in determining regional independence. Refers to a region's ability to manage its own financial resources, make budget decisions and implement programs and policies without excessive dependence on the central government. Therefore, regional financial performance is thought to have an impact on increasing regional independence. Good and sustainable financial performance at the regional level allows these regions to have greater fiscal independence and allows them to be more effective in dealing with needs and priorities. The hypotheses that can be described are as follows.

**H1: Financial performance has a positive influence on increasing regional independence.**

## **2.2. The influence of non-financial performance on regional independence.**

Non-financial performance according to Chinaemerem and Anthony [22], Fornell et al. [23], Hodgson [24], Sinding et al. [25], Škrinjar et al. [26], and Teeratansirikool et al. [27] can be a determinant of regional capacity in implementing regional government. Non-financial performance can be seen based on the effectiveness of resource management owned by a region. Non-financial performance refers to performance indicators including elements such as quality of public services, citizen satisfaction, government governance, and environmental conservation efforts. Non-financial performance also plays a role UK achieves regional independence [28]. The non-financial performance in question is aspects such as governance, public services and infrastructure development, where all these aspects will be evaluated through regional government implementation performance evaluation (EKPPD) [6]. The higher the regional government's ability to administer its government, the more regional independence will increase [28]. Sundari and Arza [29] also stated that the non-financial performance of the regional government is a reflection of the level of regional independence in formulating and implementing programs, and policies and realizing the targets, vision and mission of the regional government. Therefore, non-financial performance is also considered as

one of the factors that can trigger increased regional independence. The hypotheses that can be described are as follows.

**H2: Non-financial performance has a positive influence on increasing regional independence.**

## 2.3. Methods

### 2.3.1. Data

This research was conducted in Indonesia, specifically in regional governments. Sample selection in this research used the purposive sampling method with model testing using multiple linear regression. The data used in this research consists of 542 regions consisting of Provinces/Districts/Cities from 2016 to 2018. However, because 6 regions are included in the DKI Jakarta administrative region and 17 regions do not have data available, the final sample size is 519 observations. Or 95 per cent of the total sample. Because the analysis was carried out during 2016 to 2018, the final sample size was 1,557 observations. The data used in this research comes from Indonesian government agencies, namely the Supreme Audit Agency (BPK) for BPK audit opinion data, the Ministry of Home Affairs for evaluation data on regional government administration performance and regional characteristics data.

### 2.3.2. Empirical model and operational variables

To answer research problems and test hypotheses, the empirical model used in this research is as follows:

$$Phys\_Ind_{it} = \beta_0 + \beta_1 Opinion_{it} + \beta_2 Ekppd_{it} + \beta_3 Ages_{it} + \beta_4 Island_{it} + \beta_5 Size_{it} + e_{it}(1)$$

**Phys\_Ind<sub>it</sub>** is a variable assesses the capacity of regional governments to fund their own activities autonomously, without relying on external assistance, such as from the central government. This is quantified by dividing the total regional original income by regional income. **Opinion<sub>it</sub>** is a variable derived from an external auditor's assessment of LKPD, represented by a categorical scale where, "4" for WTP, "3" for WDP, "2" for TMP and "1" for TW. **Ekppd<sub>it</sub>** is a report variable resulting from the evaluation of the implementation performance of regional government by the Ministry of Home Affairs as measured by the ranking and performance status of regional government administration, namely, 3.5 for very high, 3.0 for high, and 0.1 for moderate. The control variable utilized

in this research pertains to the overall  $Ages_{it}$  of the regional government, quantified by the duration since its establishment. The  $Island_{it}$  represents the geographical position of the local government, identified through a binary indicator where “1” denotes Java Island and “0” signifies islands other than Java.  $Size_{it}$  indicates the magnitude of the regional government, determined by the natural logarithm of its total assets.

TABLE 1: Operationalization and Data Sources.

Name	Operational Variables	Data source
$Phys\_ind_{it}$	The capacity of regional governments to fund their own activities autonomously, without relying on external assistance, such as from the central government, is assessed by dividing the total regional original income by regional income.	Financial Agency Audit
$Opinion_{it}$	The findings from the external auditor’s review of LKPD are represented by categorical variables, where “4” for WTP, “3” for WDP, “2” for TMP and “1” for TW.	Financial Agency Audit
$Ekppd_{it}$	The evaluation outcomes of regional government administration performance conducted by the Ministry of Home Affairs are expressed through ranking and performance status. The rankings include “3.5” for very high, “3.0” for high, and “0.1” for moderate.	Ministry of Internal Affairs
$Ages_{it}$	The general age of a regional government is determined by the duration since its establishment.	Ministry of Internal Affairs
$Islands_{it}$	represents the geographical position of the local government, identified through a binary indicator where “1” denotes Java Island and “0” signifies islands other than Java.	Ministry of Internal Affairs
$Size_{it}$	indicates the magnitude of the regional government, determined by the natural logarithm of its total assets.	Ministry of Internal Affairs

Data source: Processed by researchers (2023)

### 3. Results

#### 3.1. Descriptive statistics

A comprehensive descriptive statistical overview of the variables in this study is presented in Table 2 below:

Table 2 displays summary statistics for all variables examined in this study. The mean of the variable  $Phys\_ind_{it}$  shows 12.33, suggesting that the self-sufficiency of regional governments in financing their activities without external assistance, including from the central government, was relatively low during the period of 2016-2018. Meanwhile, the  $Opinion_{it}$  variable has a mean of 3.70, meaning that the regional government in the sample has an audit opinion outside the WTP. Meanwhile, the  $Ekppd_{it}$  variable is 2.92, which shows that the evaluation of the performance of regional government

TABLE 2: Variable Descriptive Statistics.

Variable	Mean	Std. Dev.	Min	Max
Phys_ind <sub>it</sub>	12.33	11.61	0.1	86.8
Opinion <sub>it</sub>	3.70	0.63	1	4
Ekppd <sub>it</sub>	2.92	0.37	1.09	3.59
Ages <sub>it</sub>	41.42	23.44	7	68
Islands <sub>it</sub>	0.22	0.41	0	1
Size <sub>it</sub> *	4,773.93	20,841.61	820.79	464,601.75

Number of Observations = 1,557 Explanation of variable operationalization in Table 2\* In billion rupiah

Source: Secondary data, STATA-14.2 output (Processed, 2023)

administration by the Ministry of Home Affairs is close to 3.0, which means very high. Regarding the existence of the control variable, namely ages have an average of 41.22, which indicates that the average Ages<sub>it</sub> of the sample has been established at around 41 to 42 years. While the average island<sub>it</sub> variable is 0.22, it can be interpreted that the sample average used in this research is located outside Java. Furthermore, the average sample that has assets size<sub>it</sub> is 4,773.93 (in billion rupiah). Table 3 presenting the results of the correlation analysis between each variable.

TABLE 3: Variable Correlation Analysis.

Variable	Fiscal	Finqop	Ekppds	Ages	Islands	Sizetotalp
Phys_ind <sub>it</sub>	1,0000					
Opini <sub>it</sub>	0.2334***	1,0000				
	0.0000					
Ekppd <sub>it</sub>	0.3458***	0.4650***	1,0000			
	0.0000	0.0000				
Ages <sub>it</sub>	0.3371***	0.2013***	0.3856***	1,0000		
	0.0000	0.0000	0.0000			
Island <sub>it</sub>	0.3533***	0.1694***	0.4251***	0.4602***	1,0000	
	0.0000	0.0000	0.0000	0.0000		
Size <sub>it</sub>	0.7017***	0.1856***	0.2227***	0.3598***	0.3521***	1,0000
	0.0000	0.0000	0.0000	0.0000	0.0000	

Number of Observations = 1,557 Explanation of variable operationalization in table 1\*\*\* = Significant P-Value 1%

Source: Secondary data, STATA-14.2 output (Processed, 2023).

Table 3 shows that all the main variables of this research, such as the variables  $Phys\_ind_{it}$ ,  $Opini_{it}$ ,  $Ekkpd_{it}$ ,  $Ages_{it}$ ,  $Island_{it}$ ,  $Size_{it}$ , have a positive correlation with each other. This indicates that  $Phys\_ind_{it}$  has a perfect correlation with itself with a coefficient of 1.0000. Apart from that, the strongest correlation it has is with the  $Ekkpd_{it}$  with a coefficient of 0.3458\*\*\*.  $Opini_{it}$  shows a strong positive relationship with  $Ekkpd_{it}$  with a coefficient of 0.4650\*\*\*. However, the correlation with other variables is not that strong.  $Ekkpd_{it}$  shows a strong positive correlation with  $Ages_{it}$ , with a coefficient reaching 0.3856\*\*\*.  $Ages_{it}$  is positively correlated with  $island$  with a coefficient of 0.3338\*\*\* additionally  $Size_{it}$  exhibits a coefficient of 0.3598\*\*\*.  $Island_{it}$ , on the other hand, has a very strong positive relationship with  $Size_{it}$  with a correlation coefficient of 0.4602\*\*\*. Meanwhile,  $Size_{it}$  shows a positive correlation with  $Phys\_ind_{it}$  (0.7017\*\*\*),  $Opini_{it}$  (0.1856\*\*\*), and  $Ekkpd_{it}$  (0.2277\*\*\*).

### 3.2. Hypothesis test

The Random Effect Method with STATA-14 Software was employed for hypothesis testing in this study. Table 4 displays the test results.

In general, the outcomes of multiple linear regression analysis utilizing the Robust Standard exhibit an R-Square value of 0.533. This indicates that the research model can elucidate 53 percent of the variance in the augmentation of regional independence, with a significance level (F value) of 1 percent and an average VIF of 1.39. Hence, it can be inferred that the model does not encounter multicollinearity issues and is reliable for explicating variations in increasing regional independence in Indonesia. Table 4 demonstrates a positive correlation between financial performance and regional independence, at a significance level of 5 percent, the coefficient stands at 0.495. This finding validates H1, suggesting that the data utilized in this study supports the hypothesis. Additionally, the table illustrates a positive relationship between non-financial performance and the increase in regional independence, at a significance level of 1 percent, the coefficient stands at 5.129. This upholds H2, indicating that the data aligns with the hypothesis. Furthermore, regarding the control variables of regional government age, geographical location, and size, the results indicate a positive influence on the enhancement of regional independence at a significant level of 1 percent.



TABLE 4: Hypothesis Testing Results.

Phys_ind <sub>it</sub> = β0it + β1Opini + β2Ekppd + β3Ages + β4Island + β5Size+e <sub>it</sub>		
	Expected sign	Fiskalamdiri
<b>CONS</b>		-295,497
		0,000
<b>Opini<sub>it</sub></b>	H1:(+)	0.495**
		0.041
<b>Ekppd<sub>it</sub></b>	H2:(+)	5,129***
		0.002
<b>Ages<sub>it</sub></b>	+/-	0.008***
		0.001
<b>Island<sub>it</sub></b>	+/-	1,276***
		0.001
<b>Size<sub>it</sub></b>	+/-	10,131***
		0,000
<b>Prob &gt; F</b>		0,000
<b>R-square</b>		0.533
<b>Obs</b>		1557
<b>Mean Vif</b>		1.39

**Information:**

Explanation of variable operationalization in Table 1

\*\*\*, \*\*= Significant P-Value 1% & 5%

Source: Secondary data, STATA-14.2 output (Processed, 2023).

## 4. Discussion

First, the results of this research indicate supports the results of previous research, including those conducted by Ratang [5], who also found that regional financial performance influences regional independence. Research conducted by Luthfi et al. [6] enhancing regional competitiveness is facilitated by financial performance, as it aligns with the leadership style of regional governments in implementing policies to foster economic growth. Chaffey and Smith [30] and Trmal et al. [31] stated that effective financial performance is the main factor in supporting regional competitiveness. This is closely related to economic growth to measure the achievements of the development of a regional economy. In actual economic activities, economic growth means fiscal economic developments that occur in an area, such as increasing the number and production of industrial goods, developing infrastructure, increasing the number of schools, increasing the production of existing economic activities and other developments. Apart

from that, Kaunang et al. [32] explained that to achieve regional financial independence, it is very important to analyze the regional financial performance first. Therefore, the novelty of this research lies in analyzing the influence of financial performance on increasing regional independence. Financial performance is a representation that describes regional performance in implementing the programs to be achieved both on a macro and micro scale which plays a role in increasing regional independence in Indonesia. The second finding supports the results of previous research, including those conducted by Sundari and Arza [29] stated that the non-financial performance of regional governments is a reflection of the level of regional independence in formulating and implementing programs, and policies and realizing the targets, vision and mission of regional government. Carlin and Guthrie [33] explain how the quality of non-financial performance disclosure can assess indicators in efforts to overcome regional disparities. Liguori et al. [34] also found that non-financial performance is an important factor for local governments in innovating and developing their regions. Therefore, the novelty of this research is analyzing non-financial performance which has an impact on increasing regional independence. Because non-financial performance describes how creative local governments are in managing resources that have the potential to increase regional independence in Indonesia.

## 5. Conclusion

The research results show that independent fiscal performance in Indonesia has a significant positive correlation with factors such as financial audit opinion, evaluation of regional government administration performance, regional government age (ages), location, and total regional government assets. Statistically, the results of hypothesis testing show that each independent variable makes a significant contribution to the independent fiscal dependent variable, with size having the strongest correlation. These findings suggest that regional fiscal independence is not solely contingent on regional financial performance but is also influenced by non-financial factors such as governance and geographical conditions. The relatively high coefficient of determination (R-square) indicates that the model tested has a good ability to explain the variability of regional fiscal independence. This provides important insights for policymakers in understanding the dynamics of regional fiscal independence and in formulating strategies oriented towards increasing regional financial capacity in Indonesia.

The results of this analysis can be a basis for designing strategies and policies to increase regional independence, through improving financial and non-financial performance. Improving the quality of public services and managing resources more efficiently, as aspects of non-financial performance, will strengthen regional independence and build trust in the community. These findings can also provide valuable information to the central government to develop more impactful and efficient fund transfer and incentive policies. In addition, the results of this research can be used as evaluation and introspection material by regional governments to continue to make improvements in their performance and governance to achieve the goal of sustainable regional independence.

The research used data from 2016-2018. Regional financial and non-financial performance can change significantly due to various factors, including policy changes, macroeconomic conditions and natural disasters. Therefore, the limited data range may not capture these changes. Future research can expand the time range of the data used. For example, analysis can cover recent data or a longer period to understand trends and dynamics of regional independence over a more significant period.

## 6. Conflict of Interest

The authors have no conflicts of interest to declare.

## References

- [1] Tolosang KD. Pengaruh pertumbuhan ekonomi dan pendapatan asli daerah terhadap tingkat kemandirian keuangan daerah Kota Tomohon [The influence of economic growth and local revenue on the level of regional financial independence in Tomohon City]. *Jurnal Berkala Ilmiah Efisiensi*, 2018;18(3):79-92. (Indonesian)
- [2] Albasiah OA. Analisis kinerja pengelolaan keuangan daerah dan tingkat kemandirian daerah di era otonomi daerah: Studi kasus Kota Malang (Tahun anggaran 2007-2011) [Analysis of regional financial management performance and level of regional independence in the era of regional autonomy: Case study of Malang City (2007-2011 fiscal year)]. *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya Malang*. 2013;1(2):1-11. (Indonesian)
- [3] Martinez-Vazquez J, Lago-Penas S, Sacchi A. The impact of fiscal decentralization: A survey. *Journal of Economic Surveys*. 2017;31:1095-1129. <https://doi.org/10.1111/joes.12182>

- [4] Halim A. Akuntansi keuangan daerah: Akuntansi sektor publik [Regional financial accounting: Public sector accounting]. 3<sup>rd</sup> ed. Jakarta: Salemba Empat; 2008. (Indonesian)
- [5] Ratang S. Analysis of financial performance of local government Keerom fiscal year 2009 - 2013. *Journal of Social and Development Sciences*. 2016;7(1):31-39. <https://doi.org/10.22610/jsds.v7i1.1227>
- [6] Luthfi M, Albetris A, Rahayu R, Sumantri S. Kinerja keuangan dan kinerja non keuangan terhadap daya saing daerah Kabupaten Bungo [Financial performance and non-financial performance on regional competitiveness in Bungo Regency]. *J-Mas (Jurnal Manajemen dan Sains)*. 2023;8(1):1226-1234. <https://doi.org/10.33087/jmas.v8i1.1269>. (Indonesian)
- [7] Herawati, Tan S, Rahayu S, Yacob S. The effect of financial and non-financial performance on regional competitiveness of bungo district with capital expenditure and budget governance as intervening. *International Journal of Social Science*. 2021;1(4):347-354. <https://doi.org/10.53625/ijss.v1i4.713>
- [8] Pratiwi ET, Abdullah R, Abdullah LOD, Dja'wa A. The effect of budget ratcheting on financial and non-financial performance. *Advances in Economics, Business and Management Research*. 2020;20:23-27. <https://doi.org/10.2991/aebmr.k.200205.006>
- [9] El-Chaarani H, Abraham R, Skaf Y. The impact of corporate governance on the financial performance of the banking sector in the MENA (Middle Eastern and North African) region: An immunity test of banks for covid-19. *Journal of Risk and Financial Management*. 2022;15(2):82. <https://doi.org/10.3390/jrfm15020082>
- [10] Chirinko RS, Fazzari SM, Meyer AP. How responsive is business capital formation to its user cost? An exploration with micro data. *Journal of Public Economics*. 1999;74(1):53-80. [https://doi.org/10.1016/S0047-2727\(99\)00024-9](https://doi.org/10.1016/S0047-2727(99)00024-9)
- [11] Choi J, Kim J-B, Zang Y. Do abnormally high audit fees impair audit quality? *Auditing: A Journal of Practice and Theory*. 2010;29(2):115-140. <https://doi.org/10.2308/aud.2010.29.2.115>
- [12] Faridani MR, Roekhudin R, Adib N. Does human resource knowledge moderate the effect of good governance and regional financial performance? *International Journal of Research in Business and Social Science (2147-4478)*. 2021;10(3):189-201. <https://doi.org/10.20525/ijrbs.v10i3.1120>
- [13] Feltenstein A, Iwata S. Decentralization and macroeconomic performance in China: regional autonomy has its costs. *Journal of Development Economics*. 2005;76(2):481-501. <https://doi.org/10.1016/j.jdeveco.2004.01.004>

- [14] Mafumbo PW. Credit management, credit policy and financial performance of commercial banks in Uganda. *International Journal of Business and Management Review*. 2020;8(5):68-99. <https://doi.org/10.37745/ijbmr.vol8.no5.p68-99.2020>
- [15] Phillips JJ. Investing in your company's human capital: Strategies to avoid spending too little—or too much. New York: Amacom; 2005.
- [16] Samolyk KA. Banking conditions and regional economic performance evidence of a regional credit channel. *Journal of Monetary Economics*. 1994;34(2):259-278. [https://doi.org/10.1016/0304-3932\(94\)90052-3](https://doi.org/10.1016/0304-3932(94)90052-3)
- [17] Shirata CY. Financial ratios as predictors of bankruptcy in Japan: An empirical research. *Proceedings of the Second Asian Pacific Interdisciplinary Research in Accounting Conference*. 1998:437-445.
- [18] Shore BJ, Murphy RF, Hogue GD. Quality, safety, value: From theory to practice management what should we measure? *Journal of Pediatric Orthopaedics*. 2015;35:S61-S66. <https://doi.org/10.1097/BPO.0000000000000551>
- [19] Stoienescu EA, Marin C, Ramona CV. Positive analysis about financial performance and environmental strategies of banks. Romania's situation. *Journal of Knowledge Management, Economics and Information Technology*. 2012;2(5):200-214.
- [20] Tzelepis D, Skuras D. The effects of regional capital subsidies on firm performance: An empirical study. *Journal of Small Business and Enterprise Development*. 2004;11(1):121-129. <https://doi.org/10.1108/14626000410519155>
- [21] Kurniawati S, Busaini H, Pancawati RS. Determinants of financial performance: Study of local governments in West Nusa Tenggara. *E-Prosiding STIE Mandala Jember*. 2017;2017:1536-1560.
- [22] Chinaemerem OC, Anthony O. Impact of capital structure on the financial performance of Nigerian firms. *Arabian Journal of Business and Management Review*. 2012;34(969):43-62. <https://doi.org/10.12816/0002231>
- [23] Fornell C, Johnson MD, Anderson EW, Cha J, Bryant BE. The American customer satisfaction index: Nature, purpose, and findings. *Journal of Marketing*. 1996;60(4):7-18. <https://doi.org/10.1177/002224299606000403>
- [24] Hodgson VL. Linking marketing to shareholder value in listed and non-listed markets [Master thesis on the Internet]. Australia: Griffith University; 2004 [cited 2023 Jun 2]. Available from: <https://research-repository.griffith.edu.au/handle/10072/367168>
- [25] Sinding K, Waldstrøm C, Kinicki A, Kreitner R. *Organisational behaviour*. 5<sup>th</sup> ed. New York: McGraw-Hill; 2014.

- [26] Škrinjar R, Bosilj Vukšić V, Indihar Štemberger M. The impact of business process orientation on financial and non-financial performance. *Business Process Management Journal*. 2008;14(5):738-754. <https://doi.org/10.1108/14637150810903084>
- [27] Teeratansirikool L, Siengthai S, Badir Y, Charoenngam C. Competitive strategies and firm performance: The mediating role of performance measurement. *International Journal of Productivity and Performance Management*. 2013;62(2):168-184. <https://doi.org/10.1108/17410401311295722>
- [28] Mahmudi. *Manajemen kinerja sektor publik [Public sector performance management]*. Yogyakarta: Unit Penerbit dan Percetakan Akademi Manajemen Perusahaan YKPN; 2007. (Indonesian)
- [29] Sundari N, Arza FI. Pengaruh faktor keuangan dan faktor non keuangan terhadap kinerja pemerintah daerah [The influence of financial factors and non-financial factors on local government performance]. *Jurnal Eksplorasi Akuntansi*. 2021;3(1):218-232. <https://doi.org/10.24036/jea.v3i1.345>. (Indonesian)
- [30] Chaffey D, Smith PR. *Digital marketing excellence: Planning, optimizing and integrating online marketing*. London: Routledge; 2022. <https://doi.org/10.4324/9781003009498>
- [31] Trmal SA, Bustamam USA, Mohamed ZA. The effect of transformational leadership in achieving high performance workforce that exceeds organisational expectation: A study from a global and Islamic perspective. *Global Business and Management Research: An International Journal*. 2015;7(2):88-94.
- [32] Kaunang CE, Naukoko AT, Londa AT. Analisis kinerja pengelolaan keuangan daerah dan tingkat kemandirian daerah di era otonomi daerah: Studi pada kota manado (tahun 2010-2014) [Analysis of the performance of financial management and degree of local independence in the era of regional autonomy: Studies in the city of manado (2010-2014)]. *Jurnal Berkala Ilmiah Efisiensi*. 2016;16(2):355-365.
- [33] Carlin T, Guthrie J. The new business of government budgeting: Reporting non-financial performance information in Victoria. *Australian Accounting Review*. 2001;11(3):17-26. <https://doi.org/10.1111/j.1835-2561.2002.tb00386.x>
- [34] Liguori M, Sicilia M, Steccolini I. Some like it non-financial ... Politicians' and managers' views on the importance of performance information. *Public Management Review*. 2012;14(7):903-922. <https://doi.org/10.1080/14719037.2011.650054>