A paper presented at the 18th International Conference on Sustainable Development, Montclair State University, New Jersey, USA, 13-14 December 2023.

Factors Influencing Regional Governments to Enhance Regional Financial Independence: Cases in Indonesian Provinces

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OIDA International Journal of Sustainable Development, Ontario International Development Agency, Canada.
ISSN 1923-6654 (print) ISSN 1923-6662 (online) www.oidaijsd.com
Also available at https://www.ssrn.com/index.cfm/en/oida-intl-journal-sustainable-dev/

Abstract: The policy of giving regional autonomy in tandem with fiscal decentralization strives to ensure that regional administrations have the funds to implement regional independence following each region's capability. Policies promoting regional autonomy are supposed to improve regional financial independence independently. However, it has been discovered that achieving regional financial independence is challenging—for the region's public services. Regional independence is an important element of an area since it allows the part to build its economy and improve the welfare of its people. The issue in regional independence is optimizing local government revenue (PAD), which is a matter of numerous aspects to consider when collecting PAD. This study discovered the characteristics that influence regional financial independence, PAD, balancing money, domestic investment, and the regional minimum wage (UMR) are among these considerations. According to the findings of this study, PAD and UMR have a positive and substantial influence on regional financial independence. Still, the balancing fund and domestic investment variables have a negative and significant effect. Based on the quantitative analysis results, regional governments can undertake policy options to encourage regional financial independence, such as expanding PAD and raising the minimum wage. Regional administrations must achieve more financial independence.

Keywords: Regional Financial Independence, Local Government Revenue, Regional Minimum Wage, Investment, Indonesian Provinces, Regional Governments

Introduction

Regional autonomy is defined in Law Number 23 of 2014 respecting regional government. Regional autonomy is described in this legislation as the right, authority, and obligation of regions to regulate and manage their government activities and interests relating to the people in the area while remaining within the setting of the Republic of Indonesia. Furthermore, Royda and Riana (2019) define regional autonomy as the delegation of authority to policy decisions and fund management in the context of administering government and encouraging community services through regional financial management policies, particularly increasing regional independence.

The provision of central government transfer funds to regional governments is one method of delegating regional power, rights, and obligations to regulate and administer the regional government's operations. The provision of this money is predicated on the assumption that local governments are more aware of the needs of the people under their jurisdiction. Transfer payments are also intended to increase the financial independence of regional governments, both provincial and district/city. Regional administrations are supposed to be able to explore potential sources of income using central government transfer payments (Ginting et al., 2019).

Figure 1 depicts data from the Central Bureau of Statistics (BPS) from 2019 to 2022. The majority of Indonesian provinces remain in the bottom group. However, the positive increasing trend in financial independence, meaning the decrease in the number of provinces that fall into the extremely low category, is a very encouraging

development. There were ten provinces with very low levels of financial independence in 2019, but that number will be cut in half by 2022.

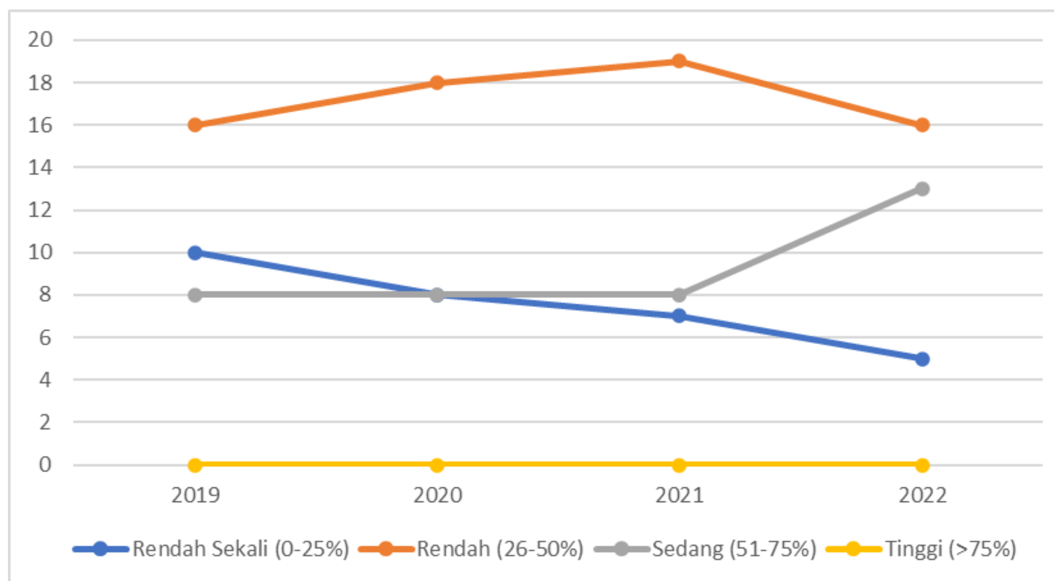

Figure 1. Distribution of Provinces According to Independence Level Categories (2019 – 2022)

Source: BPS (2023).

The policy of giving regional autonomy in tandem with fiscal decentralization strives to ensure that regional administrations have the funds to implement regional independence following each region's capability. Policies promoting regional autonomy are supposed to improve regional financial independence independently. However, it has been discovered that achieving regional financial independence is challenging. Purnama et al. (2018) found that regional revenue plays a minor role in regional financial independence. Many regional governments rely on central government transfers for development and public services in their regions.

Regional financial performance is one of the variables used to assess regional financial independence when exercising regional autonomy. Several characteristics are used to evaluate regional financial performance, according to Musgrave (1959), including fiscal necessity, fiscal capability, fiscal effort, and degree of decentralization. According to Sumarsono and Utomo (2009), the elasticity between local government revenue (PAD) and gross regional domestic product (GRDP) is an essential component in addition to fiscal demands, fiscal capacity, and degree of decentralization.

According to Firdausy (2017), PAD remains low. The proportion of local government revenue to regional income has yet to exceed 70%, with the average provincial local government revenue reaching 37.8% of regional GDP. There are even two (two) regions with a PAD share of less than 10%. Several things were discovered regarding the financial independence of regional governments in 2020, according to data from the Audit Board of the Republic of Indonesia (BPK), including the results of a review of the financial independence of 468 district/city governments out of 503 district/city governments, or around 93.4% did not or had not experienced a change of status to become a region with an independent financial situation. The district government includes just ten districts/cities with regional financial independence.

Widiastuti (2013) conducted economic sector research on regional financial independence, focusing on the tourist sector, the leading regional government sector in Bali. According to the findings of this study, the tourism industry had a favorable and considerable impact on the financial performance of districts/cities in Bali. The growing development of the tourism sector in Bali's districts/cities will encourage or support regional financial independence and enhance government income for regional government administration.

Halim (2001) states that the economic sector impacts regional financial independence, particularly regional revenues. The greater the development and growth of a region's economic activities, such as production, trade,

service, tourism, or other economic sectors, the greater the possibility of accepting blood. The possible rise is due to increased prospective regional government revenue from regional tax and levies.

Haptari et al. (2022) researched regional financial independence using four (four) research data clusters from districts/cities in Indonesia. This study discovered that improving PAD has an impact on financial independence. The PAD is based on the law on financial relations between the central and regional governments, allowing districts/cities to support an increase in PAD more freely.

The Human Development Index (HDI) is one of the characteristics that influences regional financial independence. Tabroni (2022) used data from 8 provinces in Indonesia from 2014 to 2018 based on simultaneous test results. Furthermore, this study discovered that provincial government investments had a good and significant impact on regional financial independence. Based on this, it is clear that increasing the HDI and investment factors positively impacts regional financial independence.

The labor force participation rate (TPAK) is a metric that provides a broad picture of the population based on economic activity at a given time. Increasing labor force participation has a positive impact on labor productivity, which in turn has a positive impact on people's income. A rising labor force participation rate in a location affects rising local government revenue via Income Tax. Increasing local government revenue will eventually lead to more financial independence in the area (Lewis, 2003).

The regional minimum wage (UMR) impacts the growth of the economy, particularly the regional economy. According to Apriliya et al. (2022), the UMR and open unemployment substantially affect Indonesian economic growth in the short and long run.

The demand for finances to fund regional government operations and services can be met by domestic and foreign investment. Decentralization methods in government, particularly those connected to regional operational funding, particularly fiscal decentralization, and the possibility for regions to attract foreign investment to boost regional economic capacity, are examples of decentralization practices. According to empirical studies, the fundamental explanation of the 9-fold discrepancy in foreign investment per capita between China and India is variations in fiscal decentralization (Wang, 2013).

The variables PAD, balancing funds, HDI, UMR, investment, and TPAK, were used in this study to discover factors that influence regional independence. Based on this, the objectives are as follows:

1. Identify factors that influence regional governments to increase regional financial independence in provinces in Indonesia.
2. Analyze the factors that influence regional governments to increase regional financial independence in provinces in Indonesia.
3. Looking for a strategy formula for regional governments to increase regional financial independence based on the analysis results in point (2) and factors that must be improved to increase regional financial independence.

The distinctions between this research and earlier research can be found in the approach, technique, and research items used. Previous studies examined regional independence through PAD contribution variables, regional investment, regional economic growth, and the degree of regional fiscal decentralization, among other things. Using data from the provinces of Indonesia, this study examines numerous factors that influence PAD as an intervening variable. In contrast, the Balancing Fund, HDI, UMR, Investment, and TPAK factors affect regional financial independence.

Fiscal decentralization is done by empowering regional governments to manage decentralized financial funds delegated to them by the central government to carry out decentralized responsibilities and authority. The allocation of regional government resources adheres to the principles of efficiency and effectiveness (Abimanyu, 2005). Economic correlation between the central and regional levels, by the principle of financial balance between the main and regional levels enshrined in Law Number 33 of 2004, as revised by Law Number 23 of 2014. Central and regional economic equilibrium and the most recent law, Law Number 1 of 2022, concerning central and regional economic relations, provide these resources to achieve decentralization (Yani, 2008). In principle, decentralization will bring two genuine benefits: enhanced community engagement, initiative, and innovation in development and equal distribution of development results (Madrasmu 2002).

Regional Government Law Number 23 of 2014 explicitly states the sources of income for a region. Regional income can be derived via regional taxes, regional levies, management results, regional assets, and other valid money

collected or derived from the area. Fiscal transfer funds are provided by the central government to regional governments in the form of transfer revenues, as shown in Figure 2.

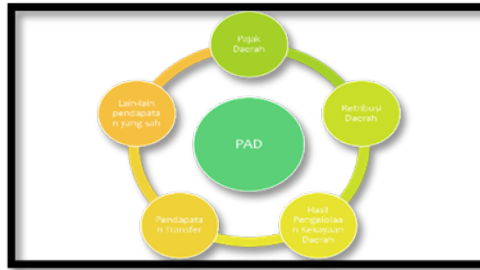

Figure 2. Regional Income Sources

Source: Law No. 23 of 2014.

Regional autonomy is implemented by Law Number 32 of 2004 on regional government and Law Number 33 of 2004 on the financial balance between the central and regional governments. According to Law Number 32 of 2004, the federal government will transfer balancing funds to implement regional government authorities. In recent years, the share of general allocation funds (DAU) to regional revenues has remained the largest compared to other regional revenues such as PAD (Adi, 2006).

The ability of regional governments to finance their own government activities, development, and services to the community who have paid taxes and levies as a source of cash needed by the region is referred to as regional financial independence. Regional financial independence also refers to a region's reliance on outside finances. The independence ratio, defined as the ratio of PAD divided by total regional revenue, is an often-used variable (Halim, 2004). One measure for assessing regional fiscal success is regional financial independence. According to Halim (2007), the regional financial independence ratio can be used to measure regional financial performance. This proportion can be expressed as follows:

$$Independence\ Ratio = \frac{Realization\ of\ PAD}{Realization\ of\ Total\ Income}$$

Table 1. Level of Regional Financial Independence

Regional Financial Capability	Regional Financial Independence (%)
Very Low	0% - 25%
Low	25% - 50%
Medium	50% - 75%
High	75% - 100%

Source: Halim (2004).

TPAK is the number of workers in an economy at a given period who are employed, looking for work, or are jobless (Sukirno, 2012). The labor force size is mostly driven by labor force participation, which can be defined as the percentage of those who will join the labor force. The TPAK ratio is calculated by dividing the number of workers by the population. TPAK can be calculated using the following ratio:

$$TPAK = \frac{number\ of\ workforce}{number\ of\ working\ age\ population} x\ 100\%$$

UMR is a Worker's right received and expressed as money as compensation from the Employer. Minimum wages are a standard form that employers use to pay laborers/employees within the limits of the business or work environment. The standards for meeting adequate needs differ by province, which is why it is known as the UMR (Purnomo, 2016).

According to Kalirajan and Otsuka (2012), fiscal decentralization has impacted developing regional governments' capacity to raise regional income. According to a study conducted in India, the focus on granting fiscal decentralization to regional governments influenced the enhancement of their capacity through quality spending. This rise in quality spending appears to increase the regional economy, leading to a surge in PAD.

According to Psycharis and Iliopoulou (2015), financial independence in an area is determined by the balancing funds provided by the government above it. Several studies have identified factors that influence regional independence, including Manasep Orocomna (2017), which examines Teluk Bintuni district's fiscal dependency on the central government by looking at the effect of motor vehicle tax on regional income, which is the region's ability to create regional budgetary independence. Lin and Liu (2000) state that local administrations must enhance capital investment to boost regional economic growth. Ahyani Wahid (2016) examined the factors that influence financial independence in districts and cities in Central Java from 2010 to 2014, using the variables financial efficiency, fixed assets, income base, income distribution, population density, and regency/city minimum wage (UMK), and discovered that income base, population density, and UMK have a positive and significant influence, while income distribution has a negative and significant effect. Meanwhile, financial efficiency and fixed assets have little impact on financial independence.

Stianegara (2016) conducted a study on factors influencing financial independence in districts/cities in Bengkulu to determine the impact of the effectiveness of PAD, DAU, special allocation funds (DAK), and profit-sharing funds (DBH) concurrently and in part, which shows that PAD, DAK, DAU, DBH together has a positive and significant effect on the level of regional financial independence. Partially, the PAD, DAU, and DBH efficacy ratios have no influence and have no substantial impact on the amount of regional financial independence. DAK negatively and severely affects the region's financial independence level.

Novalistia (2016) demonstrates that revenues obtained by regional-owned enterprises (BUMD) from separating regional wealth have a favorable and significant effect on regional financial independence. Previous research found that the increase in profits from BUMDs was the result of wealth (Sasana, 2011; Risyanto, 2015; Ruswandi, 2009; Nasir, 2019; Yupukolo and Erawati, 2019; Nuzulistyan et al., 2015; Suharyadi et al., 2018; Erawati, Nyoman and Suzan, 2015). Separated regions have a favorable influence on raising regional revenue, which leads to greater regional independence.

Haptari et al. (2022) used clustered district/city data to perform research on characteristics that influence regional financial independence, and the results are as follows: Clusters I, III, and IV discovered that direct expenditure, indirect spending, taxation, and balancing finances are the factors that determine regional financial independence. Meanwhile, in Cluster II, it was discovered that direct expenditure, indirect spending, and taxation are the elements that determine regional financial independence. However, the balanced fund variable does not substantially influence regional financial independence for district/city administrations in Cluster II.

Methodology

This study's scope includes all provinces in Indonesia, and the study period runs from 2018 to 2022. Secondary data obtained from the Ministry of Finance, the Ministry of Investment, and the Central Bureau of Statistics (BPS) were used in this study. They included data on regional financial independence, PAD, balancing funds, Human Development Index (HDI), UMR, Investment, and TPAK. In this study, the following operational definition was used:

1. The regional financial independence ratio compares PAD realization and total income performance, expressed in a ratio.
2. PAD is a PAD variable whose income source originates from the region itself, expressed in billions of rupiah.
3. Balancing funds are sourced from the central government and allocated to each region, both provinces and districts, to assist regional funding in implementing decentralization and minimizing the fiscal gap, expressed in billions of rupiah.
4. The Human Development Index (HDI) is an indicator used to measure success in building the quality of human life. It consists of 3 dimensions, knowledge, decent living, and longevity, expressed in an index.
5. UMR is the minimum wage standard received by officers or employees in a business entity covering provincial and district/city levels, expressed in rupiah.
6. Investment is a form of investment or investment originating from abroad or foreign parties and from within the country in a region, expressed in millions of dollars and billions of rupiah.
7. TPAK is the percentage of the workforce of the population aged ten years and over, expressed as a percentage.

This study continues the work done by Haptari et al. (2022) but with several differences, particularly in the approach employed to examine the influence of economic factors in supporting district/city regional financial independence. This research has hypotheses based on the description in the previous section, which include:

H1: PAD has a positive effect on financial independence
H2: The balancing fund has a positive influence on financial independence
H3: HDI has a positive effect on financial independence
H4: UMR has a positive effect on financial independence
H5: Investment has a positive effect on financial independence
H6: TPAK has a positive effect on financial independence
H7: Balancing funds have a positive effect on PAD
H8: HDI has a positive effect on PAD
H9: UMR has a positive effect on PAD
H10: Investment has a positive effect on PAD
H11: TPAK affects PAD

The research framework is depicted in Figure 3. It can be seen that the independent variables from each province are PAD, Balancing Funds, HDI, UMR, Investment, and TPAK. The PAD variable is intervening in this study.

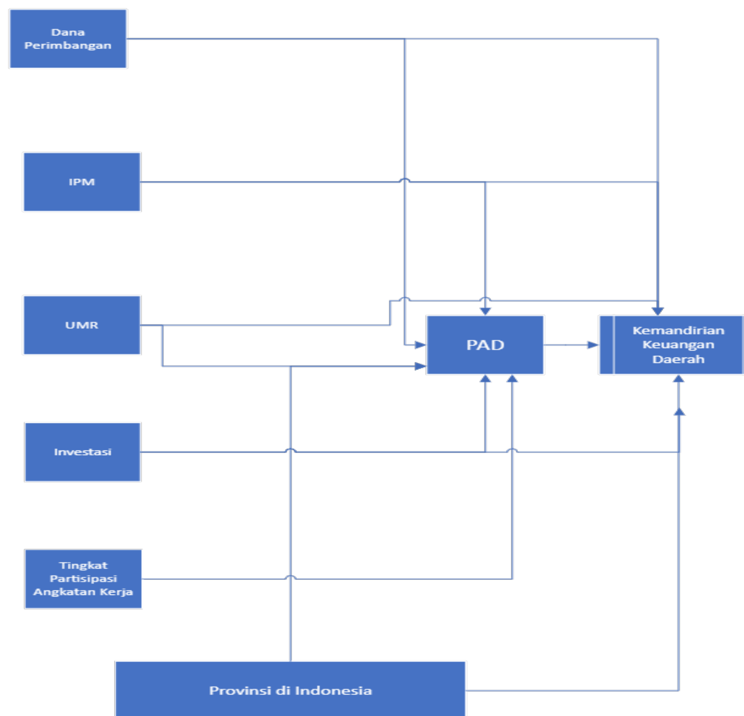

Figure 3. Research Framework

This study employs two kinds of analysis: descriptive analysis and inferential analysis. Mean, median, standard deviation and variance are all descriptive statistical analysis methodologies. Inferential statistics encompasses all approaches for analyzing partial data to forecast or draw conclusions about the full parent data set. In this study, route analysis, also known as causal modeling, is used for inferential analysis. Path analysis is a multivariate linear regression analysis extension that estimates independent factors' direct and indirect effects on dependent variables. The path analysis model contains two hypotheses:

Hypotheses 1

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 Z + \varepsilon$…………….………..(1)

Hypotheses 2

$Z = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$……………………………..(2)

where:

Y : Regional financial independence
Z : PAD
X_1 : Balancing fund
X_2 : HDI
X_3 : UMR
X_4 : Investment
X_5 : TPAK

Results and Discussion

The following is a descriptive analysis of variables from 2018 to 2022, emphasizing the size of the concentration of some of these variables.

Table 2. Descriptive Analysis

Variable	Mean	Standard Deviation	Minimum	Maximum
Financial Independence	0.203	0.127	0.038	0.734
PAD	8500.104	11944.22	718.91	54866.43
Balancing fund	23129.78	17503.34	6014.69	79341.35
Domestic Investment	12520.42	16429.52	50.9	89223.6
Foreign Investment	958.124	1370.495	5.9	7486
TPAK	68.135	3.389	62	79
UMR	2,561,431	554,864.1	1,454,154	4,641,854
IPM	71.12	3.916	60.06	81.65

According to Table 2, the average financial independence for all provinces in Indonesia from 2018 to 2022 is 0.203, with a standard deviation of 0.127. West Papua had the lowest financial independence value of 0.038 in 2018, while Jakarta had the highest at 0.734 in 2019. The higher the value of regional independence, the higher the PAD created with overall regional income. The average PAD for all provinces in Indonesia from 2018 to 2022 was 8500.19, with West Sulawesi having the lowest in 2018 at 718 billion rupiah and West Java having the most in 2022 at 54,866 billion rupiah. The average balancing fund disbursed by the federal government from 2018 to 2022 was 23.129 billion rupiah, with a standard deviation of IDR 17,503.34 billion. Gorontalo has the lowest balancing fund at 6,014.69 billion rupiah in 2022, while East Java has the largest at 79,341.35 billion rupiah in 2019.

On average, the total domestic investment in Bengkulu is 12,520.42 billion rupiah, with a standard deviation of 16,429.52. The smallest investment value in 2018 was 50.9 billion rupiah in West Papua, while the greatest in 2022 was 89,223.6 billion rupiah in Jakarta. The average weight of foreign investment in Indonesia was 958.12 million dollars, with a standard deviation of 1,370.495 million dollars. The smallest investment value is 5.9 million dollars in West Sulawesi in 2021, while the greatest is 7,486 million in Central Sulawesi in 2022.

The average TPAK in Indonesia is 68.13, with a standard deviation 3.38. North Sulawesi had the lowest TPAK percentage in 2021, while Bali had the highest in 2018. Indonesia's HDI average was 71.12, with a standard deviation of 3.91. 2018 Papua Province had the lowest HDI score, while DKI Jakarta had the highest in 2022.

The average UMR value in Indonesia is IDR 2.56 million, with a standard variation of IDR 554 thousand. In 2018, Yogyakarta province had the lowest UMR value in Indonesia, while DKI Jakarta had the highest in 2022.

The following is an inferential technique to produce the best estimate; picking a panel data regression model requires numerous stages. The best model is chosen using statistical tests such as the Chow test, Hausman test, and Breusch-Pagan Lagrangian multiplier test, which are performed on models 1 and 2 as follows:

1. **Model 1**

$Z = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$……………..(1)

where:

Z : PAD
X_1 : Balancing fund
X_2 : HDI
X_3 : UMR
X_4 : Domestic investment
X_5 : Foreign Investment
X_6 : TPAK

The Chow test selects the best model from the common and fixed effect models. The following is the Chow test hypothesis:

H_0 : The common effect model is the best
H_1 : Fixed effect model is the best model

The Chow test F statistic value is 66.33, with a p-value of 0.00. A p-value less than 5% alpha suggests that H0 is rejected. Hence, the fixed effect model is chosen as the best model. The Hausman test was then used to select the best model from the random and fixed effect models.

The Hausman test was used to determine the best model between the random and fixed effect models using the Chi-square test statistic. The hypothesis from the Hausman test is as follows.

H_0 : The random effect model is the best
H_1 : Fixed effect model is the best model

The Chi-square test has a statistical value of 478.82 and a p-value of 0.00. The p-value of 0.00 is less than alpha 5%, indicating that H0 is rejected. Hence, the fixed effect model is the best. Because the fixed effect model is the best model based on the test results, the parameter estimate will utilize the fixed effect model.

Table 3. Summary of FEM Output with Modified Durbin Watson

Variable	Coefficient	Standard Error	p-Value
LN (Balancing Fund)*	-0.463	0.132	0.001
IPM*	0.152	0.029	0.00
LN (UMR)*	-1.063	0.322	0.001
LN (Domestic Investment)	0.0091	0.022	0.683
LN (Foreign Investment)	-0.013	0.018	0.471
TPAK	0.014	0.009	0.142
Constant *	16.77	3.771	0.00

** significant at 5% significance level*

$LN(Z) = \alpha - 0{,}463LN(X_1) + 0{,}152X_2 - 1{,}063LN(X_3) + 0{,}0091DN(X_4) - 0{,}013LN(X_5) + 0{,}014(X_6) + \varepsilon$ ……………………....(2)

where:

Z : PAD
X_1 : Balancing fund
X_2 : HDI
X_3 : UMR
X_4 : Domestic investment
X_5 : Foreign investment
X_6 : TPAK

Balancing funds considerably impacts the dependent variable PAD; the coefficient size is -0.463, meaning that a 1% increase in balancing fund growth has a 0.463 percent impact on decreasing PAD growth. This is consistent with the idea that the lower the PAD, the higher the balance fund transfer. The findings of this study are consistent with those of Khoirunisa and Sulaeman (2022), who discovered that redistributing monies from the federal government to regional governments improved regional income.

Furthermore, our research is consistent with that of Sari et al. (2019), who used the Moderate Regression Analysis (MRA) approach to collect samples in the Ciamis district. According to the findings of this study, decentralization, along with balancing money, has a favorable impact on improving regional income. This rise comes from sources the region has successfully increased, affecting growing regional revenue sources.

With a coefficient value of 0.152, the Human Development Index (HDI) substantially positively affects the dependent variable PAD. The size of the correlation indicates that a one-unit increase in the Human Development Index will result in a 0.152 percent increase in PAD growth. This study supports the findings of Setiawan et al. (2023), who discovered a favorable link between HDI and government performance as evaluated by PAD.

One of the factors in the model that has a substantial negative influence is UMR. The coefficient for the UMR variable is 1.063, which means that a 1% rise in UMR growth will result in a 1.063 percent decrease in PAD. The findings of this study differ from those of Sesana and Dewi's (2023) study, which used a sample of districts/cities in Bali Province. The findings of this study revealed a positive and substantial relationship between UMR and PAD. The investigation employing all provinces in Indonesia contributed to the large but negative UMR. The results of this study can also be seen in the picture below. The scatter diagram results of the two variables between UMR and PAD demonstrate that these two factors negatively influence each other.

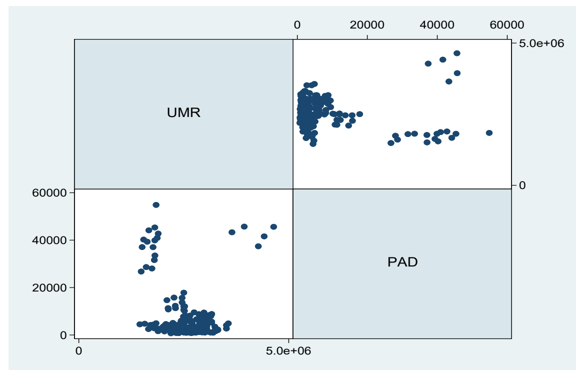

Figure 4. Scatter Diagram of UMR and PAD

2. **Model 2**

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 Z + \varepsilon \quad (3)$$

Keterangan:

Y : Regional financial independence
Z : PAD
X_1 : Balancing fund
X_2 : HDI
X_3 : UMR
X_4 : Domestic investment
X_5 : Foreign investment
X_6 : TPAK

Financial independence is the dependent variable in model 2, while PAD, the dependent variable in model 1, becomes the independent variable in model 2. The best model is chosen by performing the Chow, Hausman, and Breusch-Pagan tests.

The Chow test selects the best model from the common and fixed effect models. The following is the Chow test hypothesis:

H_0 : The common effect model is the best
H_1 : Fixed effect model is the best model

The Chow test F statistic value is 30.72, with a p-value of 0.00. A p-value less than 5% alpha suggests that H0 is rejected. Hence, the fixed effect model is chosen as the best model. The Hausman test was then used to select the best model from the random and fixed effect models.

The Hausman test was used to determine the best model between the random and fixed effect models using the Chi-square test statistic. The hypothesis from the Hausman test is as follows:

H_0 : The random effect model is the best

H_1 : Fixed effect model is the best model

The Chi-square test has a statistical value of 134.84 and a p-value of 0.00. The p-value of 0.00 is less than alpha 5%, indicating that H0 is rejected. Hence, the fixed effect model is the best.

Because the fixed effect model is the best model based on the test results, the parameter estimate will utilize the fixed effect model.

The Generalized Least Square (GLS) estimate is used to estimate the parameters in the model to construct a robust statistical model of heteroscedasticity and autocorrelation.

Table 3. Summary of FEM Output with the GLS Method

Variable	Coefficient	Standard Error	p-Value
LN (PAD)*	0.171	0.005	0.00
LN (Balancing Fund)*	-0.165	0.006	0.00
IPM	-0.0001	0.0009	0.886
LN (UMR)*	0.074	0.0117	0.00
LN (Domestic investment)*	-0.011	0.0031	0.00
LN (Foreign Investment)	0.003	0.0019	0.105
TPAK	0.0008	0.0007	0.303
Constanta*	-0.671	0.2207	0.002

** significant at 5% significance level*

$$Y = -0{,}671 - 0{,}165LN(X_1) - 0{,}0001X_2 + 0{,}074LN(X_3) - 0{,}011LN(X_4) + 0{,}003LN(X_5) + 0{,}0008X_6 + 0{,}171LN(Z)$$

Keterangan:

Y : Regional financial independence

Z : PAD

X_1 : Balancing fund

X_2 : HDI

X_3 : UMR

X_4 : Domestic investment

X_5 : Foreign investment

X_6 : TPAK

According to the panel data regression model, four variables significantly influence regional financial independence: the PAD, balancing fund, UMR, and domestic investment.

PAD is regional income collected in accordance with statutory regulations to give authority to the Regional Government to fund the implementation of regional autonomy in accordance with regional potential as an embodiment of decentralization. According to this approach, a 1% rise in PAD growth raises the financial independence ratio by 0.1715. The findings of this study are consistent with those of Yulianti et al. (2018), who used sample data from districts and cities throughout Indonesia from 2013 to 2016. The findings of this study suggest that boosting PAD has a favorable and considerable impact on the financial independence of districts/cities throughout Indonesia.

Balancing funds are APBN funds meant to balance the fiscal difference between regions and the center to foster decentralization. A 1% rise in the growth of balancing funds results in a 0.165 fall in the financial independence ratio. This study is consistent with the work of Ginting et al. (2019), who collected data from all districts and cities in Indonesia from 2013 to 2018. According to the findings of this study, the availability of balanced finances fostered enhanced regional financial independence in districts/cities across Indonesia.

The UMR is the standard cost firms must pay employees, as defined by the government. According to the regression model above, a 1% rise in UMR will increase to 0.074. This study's findings are consistent with those of Qisthina et

al. (2019), who performed research in 12 districts and cities from 2012 to 2017. According to the results of this study, there is a positive and substantial relationship between the minimum wage variable and regional financial independence.

Domestic investment is defined as investment made in the country by domestic investors. According to the resolved regression model, a 1% rise in domestic investment growth reduces the financial independence ratio by 0.011. The findings of this study are consistent with those of Indriasih et al. (2023). This study uses data from districts and cities in Central Java Province from 2017 to 2021. According to the findings of this study, domestic investment has a detrimental impact on regional financial independence.

Furthermore, investment has a negative effect because the investment value is still low in investment realization, according to Indriasih et al. (2023). Low investment realization, particularly for investment from within the country. It influences the lack of maximum domestic investment, which has a multiplier effect on the area's financial independence.

3. Sobel Test

The Sobel Test is a mediator variable mediation test used to determine whether the mediator variable can mediate the link between the independent and dependent variables. The Sobel Test employs the z test and the following formula:

$$z = \frac{ab}{\sqrt{(b^2 SE_a^2) + (a^2 SE_b^2)}}$$

Where:
a: regression coefficient of the independent variable on the mediating variable
b: regression coefficient of the mediating variable on the dependent variable
SE_a : Standard error of estimation and the influence of independent variables on mediating variables
SE_b: Standard error of estimation and the influence of mediating variables on the dependent variable

Three variables substantially affect model 1, notably the balancing fund variable, the human development index (HDI), and the UMR. The Sobel test values are listed in the table below.

Table 4. Sobel Test Result

Variable	Coefficient	Standard Error	Z Score
Balancing Fund (a_1)	-0.463	0.132	-3.4892
HDI (a_2)	0.152	0.029	5.1808
UMR (a_3)	-1.063	0.322	-3.2859
PAD (b_1)	0.171	0.005	

According to Table 4, a Z test value greater than 1.96 and -1.96 suggests that the PAD variable can mediate between three independent factors (Balancing Funds, Human Development Index, and UMR) and the dependent variable (Financial Independence Area). PAD can potentially serve as a moderating component for regional financial independence. According to Dian and Marheni's (2020) research, strengthening PAD favors regional financial independence.

Furthermore, PAD must be allocated to public spending, which can incentivize an increase in public spending, according to Mawarni and Abdulah (2013). The ability of a region to optimize regional income through PAD influences its financial independence.

Conclusion

One of the goals of adopting regional autonomy in Indonesia is regional financial independence. This study discovered the characteristics that influence regional financial independence. These considerations include PAD, balancing money, domestic investment, and the minimum wage. According to the findings of this study, PAD and UMR have a positive and substantial influence on regional financial independence. Still, the Balancing Fund and Domestic Investment variables have a negative and significant effect.

The Sobel test results suggest that the PAD variable can moderate three independent variables: balancing finances, human development index, and minimum wage for regional financial independence. Regional governments can

undertake policy solutions that are predicted to encourage regional financial independence based on the results of the aforementioned quantitative analysis.

Based on the previous section's quantitative analysis findings, regional administrations can undertake a number of potential strategies to promote regional financial independence. This policy strategy emphasizes increasing variables that local governments may control, such as expanding PAD and raising the minimum wage. Regional administrations must achieve more financial independence.

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