



The Influence of Regional Head Characteristics on Regional Government Investment & Level of Regional Independence (Study of Provincial Governments in Indonesia)

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Abstract. This research aims to analyze the influence of regional head characteristics on regional government investment and how much influence it has on the level of regional independence in Indonesia. Using provincial regional government data in Indonesia during 2017-2021 having reached a conclusive sample size of 170 observations. This yields the results research show that the characteristics of regional heads have an influence on the investment level of a region. Apart from that, it was found that the characteristics of regional heads and investment play a role in increasing regional independence. The results of this research have the implication that every regional head needs to strengthen both professional and educational backgrounds. In addition, to increase investment, it is necessary to evaluate the productivity of regional heads by utilizing existing resources in the region. In this way, regions will be able to finance their own autonomous activities, which will be followed by increased regional independence.

Keywords: Characteristics of regional heads, investment, regional independence

1. Introduction

Regional financial independence is a key factor in achieving successful regional economic development and the realization of an advanced and prosperous region. However, in fact, the past two decades of regional autonomy and fiscal centralization have not had an impact on fundamental changes in the level of regional independence. In this regard, research has developed that analyzes the influence of the characteristics of regional heads on regional government investment and the level of regional independence in Indonesia. Several previous studies have analyzed the level of investment and regional independence. Among them, Yu et al.,(2012), Muniandy & Hillier,(2015), Furqan et al.,(2020), Samoylova et al.,(2021), Kozera et al.,(2022), Djellouli et al.,(2022), and Chang et al.,(2023) However, to date this research is still limited in analyzing regional investment and regional independence and specifically

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discussing the role of regional head characteristics on the level of regional government investment and regional independence. Apart from that, in earlier research, still rare to find the role of regional head characteristics in efforts to achieve regional independence. Therefore, this study was undertaken to specifically analyze one of the supports for regional independence, namely permanent investment, which is one of the factors supporting regional independence, especially if this Investing yields positive effects on regional economic and infrastructure development.

It has been two decades since the implementation of fiscal decentralization in Indonesia, where to enhance the quality of public services and improve people's welfare, we must continue to improve the quality of financial relations involving both the central government and regional administrations that are more transparent and There exists a relationship between the central and regional governments accountable so that the processing of fiscal resources between the central and regional governments is more effective and efficient (Ministry of Finance, 2021).

Influence of Leaders on Policy and Investment: The characteristics and leadership of a regional head, such as educational background, experience, profession, and age preferences, can influence the policy priorities and investments they make. Rataj et al.,(2021) Characteristics of areas experiencing backwardness and structural weakness influenced by Slavic investment,(2022), The Central Role of Regional Heads in Regional Development plays a major role in making decisions related to investment in their region. They have the authority to direct and determine local government investment priorities. Therefore, understanding how the characteristics and leadership of a regional head influence investment policy is an important step in understanding the dynamics of regional development(Pike et al., 2016).

The question to be answered in this research is what role the characteristics of regional heads play in regional government investment decision making and how this impacts the level of independence in various regions. The objective of this study is to gather empirical evidence on the impact of regional head characteristics on regional government investment and the level of regional independence. In addition, We hope that the outcomes of this study will offer information and develop knowledge about regional independence through the characteristics of regional heads regarding regional investment.

Based on regional government data in Indonesia, the researchers used information from the Central Statistics Agency (BPS). and the Financial Audit Agency (BPK) consisting of 170 provinces during 2017-2021 With a conclusive sample size of 170 observations, numerous discoveries and contributions have emerged from this study. The research can be described as follows. First, the implementation of permanent regional investment has a positive effect on fiscal independence. Just like research conducted by Kappeler et al.,(2012) shows that centralized regional investment, increasing regional income and developing economic potential through the development of adequate infrastructure, can generate regional income from a number of sources, such as property taxes, hotel taxes and other taxes and can help develop regional economic potential. For example, the construction of roads, ports, or shopping centers can encourage the growth of local businesses and

industry, which in turn will create jobs and increase regional income. Second, the characteristics of regional heads which are proxied by age and profession have a negative effect on the level of regional fiscal independence. This suggests that older regional heads may tend to have more conservative views and be less inclined to adopt policy changes or management practices that could improve regional financial efficiency. This could hamper efforts to increase fiscal independence. Third, regional investment has a negative effect on the age of regional heads and a positive effect on the profession of regional heads. This shows that the higher the age of regional heads tends to reduce their level of investment and the profession of regional heads tends to result in an increase in regional investment.

The limitation of this research is that the variables analyzed are quite limited to the characteristics proxied by the age of the regional head and the regional head's profession. Other variables not taken into account in this research may influence local government investment and the level of regional independence. There are many other factors, such as national policies, economic conditions, and political pressures, that can play a role in investment decisions. The first section will present the hypothesis testing results. Moving forward, the fifth section will delve into the research's conclusions, implications, limitations, and suggestions for future studies.

2. Literature Review and Hypotheses

2.1. Government Expenditure Theory

During the initial phases of economic development, the portion of investment spent by the government on total investment is quite large. This is due to the government's need to provide infrastructure such as education, health services, and transportation systems. However, when the economy develops to the middle stage, the role of government investment remains important to encourage sustainable economic growth, although at this stage, private investment increasingly dominates. The role of government still has a significant impact in this intermediate stage because strong private sector growth can cause market failures that have the potential to disrupt economic stability. It also encourages governments to increase the enhancement of public goods and services provision. In addition, at this stage, economic development can cause the emergence of complex problems such as pollution or contamination related to the expansion of the industrial sector. In this context, the government must actively regulate and reduce the negative impacts of pollution that arise as a result of economic growth (Rostow and Musgrave in Mangkoesobroto, 1993).

Musgrave (1980) believes that in the development process, the ratio of private investment to Gross Domestic Product (GDP) is increasing while the proportion of government investment to GDP is getting smaller. In more advanced economic stages, Rostow states that the government's role in economic development shifts from building infrastructure to spending on social activities such as pension programs and public health services.

2.2. Agency Theory

Agency theory pertains to the connection between principals (shareholders or owners) and agents (managers or officials who run a company or organization). In the context of regional government, the principal can be defined as the community or stakeholder, while the agent is the regional head or government official. The essence of this theory is the potential conflict of interest between the principal and the agent due to asymmetric information and differences in goals between the two. Zimmerman,(1977).

2.3. Influence Permanent Regional Investment towards Fiscal Independence

Regional investment refers to the allocation of financial resources carried out by regional governments in the form of fixed assets or long-term investments with the aim of supporting regional sustainability and growth. This investment can be in the form of infrastructure development, public facilities, or other investments that are expected to provide long-term benefits for the Bahl & Bird area,(2013). according to Myers & Majluf,(1984)This type of investment requires an in-depth analysis of the growth potential, risks involved, and tax implications. One of the main characteristics of a permanent investment is its commitment to sustainability and a long-term vision, in contrast to short-term investments that may focus on quick profits(Hazen, 1991). Additionally, permanent investments often require significant funds and the ability to withstand short-term market fluctuations for long-term benefits(Siegel, 2021). Therefore, a deep understanding of the industry, market and macroeconomic dynamics is crucial (Caballero, 2010).

Research by Myers & Majluf,(1984)discusses how companies make funding and investment decisions based on information that may not be available to investors. Although the primary focus is on corporate financing, this research provides valuable insights into how asymmetric information can influence investment decisions, including permanent investments.

Fiscal independence is the ability of a region to finance its budget needs from its own regional income sources without relying on transfers from the central government or other external funding sources. Fiscal independence shows how strong and stable regional finances are in facing various needs and challenges(Smoke, 2001). To achieve this, the role of investment is very important in encouraging economic growth(Sulistiawati, 2012)research conducted by Borensztein et al., (1998) and Milbourne et al.,(2003)states that investment has an influence on economic growth. Midgley, (1999)also emphasizes that investment has the ability to influence people's welfare. In addition, research conducted by Anderson et al.,(2006)revealed that investment also has the potential to influence poverty levels. From the existing phenomena, researchers want to reveal whether investment can influence regional independence. Just like research conducted by Yuliana et al.,(2019)which obtained the results that investment was significantly positive for regional ministry.

H1: the implementation of permanent regional investment has a positive effect on fiscal independence

2.4. Influence Characteristics of Regional Heads as Proxied by Age and Profession on the Level of Regional Fiscal Independence

The characteristics of regional heads can influence the way they lead and make decisions. Age and profession are two main indicators that are often used to understand how a person's background can influence their policies and actions as a leader (Saidel & Loscocco, 2005). According to Zainuddin, (2022) The age of a regional head refers to the age of a person when serving as a regional executive leader, such as mayor, regent or governor. Although not a definite rule, sometimes older regional heads may be less open to new ideas or innovation, especially those related to technology. In contrast, younger regional heads may be more adaptive and responsive to change and innovation (Fisk et al., 2020)

The age of regional heads can also influence how they are seen by voters. Some voters may choose a younger leader in the hope of new energy and outlook, while others may value the wisdom and stability associated with an older regional leader by Bosco & Susannah, (2016), age can have an impact on a person's health and stamina. (Bonnette et al., 2020) stated Older regional heads may face more health challenges, which could affect their ability to carry out daily tasks, while younger regional heads may have more energy.

According to Kodiyat et al., (2020) The profession of regional head refers to the work or career background that a person had before they served as a regional leader, be it as mayor, regent, governor, or other regional leadership position. A person's professional background can provide insight into their perspective, skills and approach in leading and making decisions as a regional head.

Meanwhile, according to Beschel Jr & Ahern, (2012) A regional head with a background in economics or finance tends to have a deeper understanding of the basic principles of regional finance, budgeting, and resource management and allocation. Thus, the profession or background of regional heads has great potential to influence the way regions manage their finances. However, fiscal independence does not only depend on the professional background of the regional head, but also on many other factors such as the quality of the bureaucracy, regional resources, central government policies and local political dynamics.

H2: Influence The characteristics of regional heads as proxied by age and profession have a negative effect on the level of regional fiscal independence

2.5. The Influence of Regional Investment on the Age of Regional Heads and the Profession of Regional Heads

In reality, the effect of regional investment on the age and profession of regional heads can be very complex and influenced by various other factors, including the regional socio-political context, regional government organizational culture, and local

economic dynamics. However, by understanding the potential influence of regional investment on the age and profession of regional heads, according to Sachs & Rulhli,(2011)stakeholders can design more effective strategies to optimize the benefits of investment for society.

Negative Influence on Age of Regional Heads, Resistance to Change. According to Dawes & Topp,(2022)Older regional heads may be more resistant to change, especially regarding new investment projects they have never encountered before. They may prefer to stick to traditional methods or projects that have proven their effectiveness in the past. Less Adaptive: As people get older, it is possible that regional heads will become less adaptive to new technology and innovation in investment projects, which may be considered essential in the modern era.

Positive Influence on Regional Heads' Profession, Specialization and Expertise. According to Grol et al.,(2007)Certain professions may provide local leaders with the skills and perspectives necessary to understand, plan, and implement investment projects more effectively. For example, a regional head with an economics background may have a deep understanding of cost-benefit analysis of an investment project. Networks and Connectivity(Sartori et al., 2014), Certain professions may have provided regional heads with extensive networks of contacts that can be leveraged to obtain support, resources, or partnerships for regional investment projects.

Professional Approach, according to Goodridge et al.,(2015)Professional background may influence the way regional heads approach investment projects, with a more systematic, data-based and results-oriented approach.

H3:Regional investment has a negative effect on the age of regional heads and a positive effect on the profession of regional heads.

3. Research Method

3.1. Data

This research uses regional government data in Indonesia from 34 provinces from 2017-2021 with a sample size of 170 observations. Sample selection used purposive sampling technique. In 2022, there will be an addition of 3 provinces in Indonesia, bringing the total number of provinces from 34 to 37 provinces. Therefore, the data used in this study only includes information up to 2021. All information used in this study was obtained from regional governments in Indonesia. Permanent investment data is obtained from the Central Statistics Agency (BPS), while data related to the level of fiscal independence comes from the LKPD which is obtained from the financial audit agency (BPK). Information about age and professional background is taken from regional profiles.

Empirical model and operationalization of variables

To answer research problems and test hypotheses, data analysis uses Conditional Mixed Process (CMP) STATA-14.2. So the empirical model in this research is as follows:

$$\text{Fiscalit} = \beta_0 + \beta_1 \text{investment}_{it} + \beta_2 \text{ageskd}_{it} + \beta_3 \text{Profession}_{it} + \beta_4 \text{ages}_{ite} + \beta_5 \text{Sisland}_{ite} + \varepsilon_{it} \dots \dots (1)$$

$$Investment_{it} = \alpha_0 + \alpha_1 ageskd_{it} + \alpha_2 profession_{it} + \alpha_3 ages_{it} + \alpha_4 island_{it} + \epsilon_{it} \dots\dots\dots(2)$$

Description :

- Y : Dependent Variable
- X1 – X5 : Independent Variables
- M : Mediation
- A : Constant
- $\beta_1 - \beta_k$: Regression Coefficients
- e : Error

Based on this research, it will be as follows:

- Y : Level of Regional Independence
- X1 : Regional Head Characteristics
- M : Local Government Investment
- A : Constant
- $\beta_1 - \beta_k$: Regression Coefficients
- e : Error

The main variables in this research are $fiscal_{it}$, $investment_{it}$, and characteristics of regional heads, consisting of $ageskd_{it}$, and $profession_{it}$. $Fiscal_{it}$ is a regional independence variable which is measured by the amount of local original income divided by the total regional income. $Investment_{it}$ is a regional government investment variable which is measured by the natural logarithm of the amount of long-term regional government investment, especially permanent investment. $Ageskd_{it}$ is the regional head age variable which is measured by the number of years of age of the regional head from birth to the year of observation. $Profession_{it}$ is a regional head professional variable which is measured using a dummy, namely "1" if the regional head is a politician, and "0" otherwise.

The control variables in this study are $Ages_{it}$ and $Island_{it}$. $Ages_{it}$ is a regional government age variable which is measured using the number of years since the formation of the regional government until by year of observation. $Island_{it}$ is a regional government geographical location variable which is measured using a dummy, namely "1" if the regional government is on the island of Java, and "0" otherwise. To provide an overview concise operational variables and data sources for this research can be seen in table 1.

Table 1. Operational Variables

Name	Variable Operationalization	Data source
$Fiscal_{it}$	Independent fiscal is a variable obtained by comparing local original income (PAD) with the total income received by the region at the same time	Local government report
$Investment_{it}$	Permanent investment is measured by the value of long-term assets owned by an entity	Central Bureau of Statistics
$Ageskd_{it}$	Age is measured based on the number of years or months that have passed since the	Ministry of Internal

Profession _{ite}	regional head's date of birth is a regional government professional status variable which is measured using a dummy, namely "1" if the regional government has city status, and "0" otherwise.	Affairs. Ministry of Internal Affairs.
Ages _{it}	Regional government age in 2017, measured by the number of years since the formation of regional government until 2021.	Ministry of Internal Affairs.
Island _{ite}	The geographical location of the Regional Government, measured by dummy islands, namely "1" is Java Island, "0" is the other.	Ministry of Internal Affairs.

4. Results and Discussion

4.1. Descriptive statistics

A complete descriptive statistical the variables in this study are outlined in Table 2 below

Table 2
Descriptive Statistics

Variable	170	Mean	Std. Dev.	Min	Max
Fiscalit	170	35.61	15.72	5.21	71.88
Investment*It	170	3,440.08	10,183.71	3.76	72,600.18
Ageskdit	170	61.28	8.25	37	81
Professionite	170	1.3	0.80	1	4
Agesit	170	50.5	19.17	5	71
Islandite	170	0.17	0.38	0	1

Number of Observations = 170
 Explanation of variable operationalization in table 1
 *) In billions of rupiah

Table 2 depicts statistical descriptions for all variables examined in this analysis research. The average of the fiscalit variable is at 35.61, this figure is below 50. This means that the provincial government that was the sample in this study had low fiscal independence in the year of observation. Mean of the variableinvestmentit has a mean value3,440.08This means the permanent investment sample is around 3.4 trillion rupiah. Mean of the variableageskditshowing61.28. This means that the average age of regional heads in Indonesia is over 50 years. Mean of the variableprofessionit with mean value1.3. This means that on average regional heads in Indonesia work as politicians.

Mean of the ages_{it} variable has a mean 50.5, it can be interpreted that the sample average was formed before government reform was carried out in Indonesia, namely in 1998. Meanwhile, the mean of the island_{ite} variable shows the number 0.17

it can be interpreted that on average the samples used in this research are regional governments located outside Java with provincial status.

Table 3
Variable Correlation Analysis

variable	fiscal _{it}	investment _{it}	ageskd _{it}	profession _{it}	ages _{it}	
Fiscalit	1,000					
Investmentite	0.624*** (0.000)	1,000				
Ageskdit	-0.311*** (0.000)	-0.202*** (0.008)	1,000			
Professionite	0.1402** (0.068)	0.271*** (0.000)	0.018 (0.81)	1,000		
Ages _{it}	0.4145 *** (0.000)	0.716*** (0.000)	0.0331 (0.668)	-0.056* (0.461)	1,000	
Island _{it}	0.566*** (0.000)	0.5315*** (0.000)	-0.1753** (0.022)	0.192*** (0.012)	0.222*** (0.003)	1,000

Number of Observations = 490.

Explanation of variable operationalization in table 1.

***, **, * = significant P-value 1%, 5%, 10%.

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

Table 3 illustrates that all key variables in this research are variables Fiscalit and investmentit, ageskdit and professionit have a correlation with each other. In accordance with what was predicted in the previous section, the characteristics of regional heads have a significant negative correlation with regional investment and a positive correlation with regional independence. As well as investment as a mediation between the characteristics of regional heads and regional independence. However, it is also associated with the age and geographical location of local authorities.

b. Hypothesis Test

Hypothesis test in this research uses the method Conditional Mixed Process (CMP) data analysis with the STATA-14.2 software program. The findings are displayed in Table 4:

Table 4
Hypothesis Testing Results

Variable	Expecte d Sign	Individual Model Test		Full Model Test	
		INVESTMENTit	FISCALit	INVESTMENTit	FISCALit
1	2	3	4	5	6
_Cons		25,673 (0.001)	-32.124 (0.228)	25,673 (0.000)	-32.124 -
Investmentite	(-)	-	3,028*** (0.003)	-	3,028*** (0.000)
Ageskdit	(-)	-0.037*** (0.000)	-0.359*** (0.002)	-0.037*** (0.000)	-0.359*** (0.000)

Variable	Expected Sign	Individual Model Test		Full Model Test	
		INVESTMENTit	FISCALit	INVESTMENTit	FISCALit
1	2	3	4	5	6
Professionite	(+)	0.547*** (0.000)	-0.095 (0.938)	0.547*** (0.000)	-0.095 (0.932)
Agesit	(+)	0.604*** (0.000)	0.088* (0.250)	0.604*** (0.000)	0.088* (0.095)
Islandite	(?)	1,370*** (0.000)	13,703*** (0.000)	1,370*** (0.000)	13,703*** (0.000)
Prob > chi2/Prob > F		0.000	0.000	0.000	0.000
Pseudo R2/Adj R-squared		0.740	0.484	0.740	0.484

Number of Observations = 170.

Explanation of variable operationalization in table 1.

***, = significant P-value 1%, 5%,

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

The data presented in Table 4 illustrates that investmentit variable positively influences the fiscal variable, as indicated by a coefficient of 3.028, significant at a level of 1 percent. These results show the data utilized in this study substantiates H1, so that the regression results show that permanent investment has a significant positive effect on regional independence.

In column (3) of Table 4, it is evident that the ageskdit variable has a negative impact on investmentit with a coefficient of -0.037, significant at the 1 percent level. Therefore, it can be concluded that the data used in this study supports H2, implying that an increase in the age of regional heads affects the level of regional investment. Meanwhile, column (4) of Table 4 indicates that the ageskdit variable directly has a negative impact on fiscalit with a coefficient of -0.359, significant at the 1 percent level. These findings suggest that the research data supports H2, indicating that higher age of regional heads correlates with a lower level of investment. In column (5) of Table 4, there is a negative effect of ageskdit on fiscalit with a coefficient of -0.037, significant at the 1 percent level. Meanwhile, column (6) of Table 4 shows that the ageskdit variable directly influences fiscalit with a coefficient of -0.359, significant at the 1 percent level.

Additionally, there is information in Table 4 that indicates the testing of H2. In Column (3) of Table 4, it is shown that the professionit variable has a positive impact on the investmentit variable with a coefficient of 0.547, significant at the 1 percent level. This implies that the profession of regional heads influences the level of regional investment. Column (4) of Table 4 depicts that the professionit variable has a negative impact on the fiscalit variable with a coefficient of -0.095, significant at the 10 percent level. This suggests that the profession of the regional head does not have an influence on the level of regional investment. On the other hand, Column (5) of Table 4 indicates that the professionit variable has a positive impact on the investmentit variable with a coefficient of 0.547, significant at the 1 percent level. Meanwhile, Column (6) of Table 4 shows that the professionit variable has a negative

impact on the fiscalit variable with a coefficient of -0.095, significant at the 10 percent level.

In the context of the role of control variables in this research model, based on the results of individual model testing in Table 4 column (3), it is observed that the agesit variable has a significant positive impact on the investmentit variable with a coefficient of 0.604, significant at the 1 percent level. Additionally, agesit and islandite also exert a significant positive influence with a coefficient of 1.370. The findings of this study suggest that, apart from the characteristics of regional heads, governance in Indonesia is influenced by the age of regional government officials (experience) and the geographical location of the regional government.

Meanwhile, the results of individual model testing in table 4 column (4) demonstrate the control variables that exert a notable impact on fiscalit variable are the agesit variable using a coefficient of 0.088 which has a significant positive effect at the 1 percent level, the islandite variable with a coefficient of 13.703 which has a significant positive effect at the 1 percent level. The results of this research show that apart from the characteristics of regional heads, governance in Indonesia is also affected by the age of the individuals involved. regional government (experience) and the geographical location of the regional government.

Apart from that, based on the results of the full model test in table 4 columns (5) and (6) it shows that the investmentit and fiscalit variables on agesit and islandite have a significant positive effect at the 1 percent level. The results of this research show that apart from the characteristics of regional heads, government in Indonesia is also influenced by the age of the regional government (experience) and the geographic position of the local government.

The First finding, Regional permanent investment, which refers to the distribution of financial resources within form of fixed assets or long-term investments, has the aim of supporting regional growth and sustainability. This kind of investment, such as the development of infrastructure and public facilities, is expected to provide long-term benefits for the region. The results of hypothesis testing that have been carried out indicate that this research has practically verified the correlation between the relationship between permanent regional investment and fiscal independence, in line with the concept explained by Yusiawati & Marhaeni(2020), Therefore, it can be concluded that permanent investment can increase regional income through increasing economic activity, for example by increasing tourism or attracting investment from the private sector(Daley & Lancy, 2011). This increased income, in turn, can increase regional fiscal independence. According to Doumpos & Cohen,(2014)By having adequate assets and infrastructure, regions can reduce dependence on allocated funds from the central government and be more independent in their funding. Although permanent investments have the potential to increase local income, there is also a risk that they will not produce the expected results. This could create a long-term financial burden for the region if loans are used to finance the project(Anagol & Gamble, 2013). while according to Inman,(2003)Fiscal independence is not just about income, but also about how funds are managed. Well-managed investments will provide maximum benefits for the region, while poorly managed investments can reduce fiscal independence.

In conclusion, permanent regional investment has the potential to increase regional fiscal independence by increasing revenues and reducing dependence on central funds. However, this success depends on the effectiveness of investment management and implementation as well as regional economic and political dynamics.

The Second finding, Based on the analysis, according to Rogante et al.,(2019)There is a negative relationship between the characteristics of regional heads, especially those related to age and profession, and the level of regional fiscal independence. Older regional heads may be more conservative in their views and less responsive to policy changes or management innovations that could improve regional financial efficiency. Jonas & Pincetl,(2006). This suggests that a more progressive view and approach may be needed to increase a region's fiscal independence.

The Third finding, according to Patel & Modi,(2017) Regional investment has a different relationship to the age and profession of regional heads. The negative influence between regional investment and the age of the regional head shows that regions led by older regional heads tend to have lower investment. (Enright, 2003). Meanwhile, Zhou et al.,(2002) said that the positive influence between regional investment and the profession of regional heads indicates that regional heads with certain professional backgrounds tend to direct their regions to make greater investments. This may indicate that the professional background of the regional head can influence his perspective and decisions in allocating investment for the region he leads.

Additional Testing: Influence of the Characteristics of Regional Head Politicians

Table 5
Additional Test Results on the Influence of Regional Head Profession

<i>Variable</i>	<i>Expected Sign</i>	Individual Model Test		Full Model Test	
		INVESTMENT _i t	FISCAL _i t	INVESTMEN Tit	FISCA Lit
1	2	3	4	5	6
_CONS		27.29 (0.000)	-36.15 (0.186)	27.29 (0.000)	-36.15 (0.186)
Investment _i t _e		-	3,136*** (0.001)	-	3,136** *
Politicians	(+)	-1,065*** (0.000)	3,136*** (0.000)	-1,065*** (0.000)	3,136** *
Ages _i t	(+)	0.058*** (0.000)	0.081 (0.113)	0.058*** (0.000)	0.081 (0.113)
Island _i t _e	(?)	1,406*** (0.000)	13,721*** (0.000)	1,406*** (0.000)	13,721* **
					(0.000)
Prob > chi2 / Prob > F		0,000	0,000		0,000
Pseudo R2 / Adj R-squared		0.137	0.388	0.720	0.484

In table 5 column (3) shows that in the "individual model test" for the investment variable, the coefficient for the Politics variable is -1.065, indicating that The coefficient shows significance at the 1 percent level. This means that regional heads who are politicians tend to have a lower investment value of 1,065 units compared to regional heads who are not politicians. For the fiscal variable in the individual model test, the positive coefficient is 3.136, showing significance at the 1 percent level. That regional heads who are politicians tend to have a higher fiscal value of 3,136 units compared to non-politicians. In the context of regional investment ($investment_{it}$), regional heads who are politicians seem to tend to invest less than regional heads who are not politicians. However, in the fiscal context ($fiscal_{it}$), regional heads who are politicians seem to have a better or higher level of fiscal independence. In other words, based on this data, regional heads with a political background may be more conservative in terms of investment but have a tendency to increase regional fiscal independence. However, it should be noted that this interpretation is based on the coefficients provided and may require further context for a full understanding of the variables and model used.

5. Closing

5.1. Conclusion

The main aim of this research is to analyze the extent of influence of regional head characteristics on regional government investment and the level of regional independence. Specifically, this research analyzes the causes and relationship between the age and profession of regional heads on the level of investment in a region. Based on sample data from 170 Indonesian provincial governments in 2017-2021, the research results show that the amount of investment made by regional governments tends to correlate with the characteristics of regional heads, such as the policies and development priorities they set. In addition, the character of regional heads also influences the level of regional independence, with increased investment by regional governments usually resulting in a decrease in the level of regional autonomy.

Thus, the characteristics of regional heads not only influence regional government expenditure, but also have an impact on the level of regional autonomy and independence. This research underlines the importance of a deep understanding of how regional heads manage regional development resources and policies to achieve investment goals and the level of independence desired by regional governments.

5.2. Research Implications

The implications of the findings from this study have an important impact on understanding the relationship between regional head characteristics, regional government investment, and the level of regional independence. Some implications that can be suggested from this research are:

1. This research highlights the importance of electing regional heads who are committed to supporting and encouraging regional government investment. The

implication is that voters and stakeholders need to take more into account the characteristics of regional head candidates in the election process.

2. The research results show that regional heads have a big role in directing regional government investment. Leadership oriented towards long-term development and innovation can increase investment that supports regional growth and independence.
3. Another implication is the need for cooperation and support between regional heads, especially in the same geographic area. Regional cooperation in terms of investment and infrastructure development can help achieve a better level of independence.
4. Regional heads and local governments need to invest in capacity development, especially in understanding financial management and investment planning. This will enable them to make more informed and effective decisions.
5. This research emphasizes the need for regular monitoring and evaluation of local government investment policies. By carrying out good evaluations, regional heads can correct ineffective policies and strengthen policies that have a positive impact on the level of regional independence.

By considering these implications, local governments can take smarter and more strategic actions in an effort to increase local government investment and their level of regional independence.

5.3. Research Limitations

1. Time Limitations: The research time span (2017-2021) may be too short to comprehensively measure the impact of regional head characteristics on regional government investment and the level of regional independence. More time may be needed to see long-term trends.
2. Variable Limitations: This research may only consider some characteristics of regional heads, while there are other factors that may have a significant influence on regional government investment and the level of independence.
3. Endogeneity Problem: This research may have difficulty distinguishing cause and effect in the relationship between regional head characteristics, local government investment, and level of independence. External factors that are not well identified may influence the results.
4. Regional Context: Different regional conditions may influence research results. This study may not have considered significant regional differences.
5. Policy Changes: Changes in government policy during the study period can have a significant impact on local government investment and levels of independence, but this research may not have taken such changes into account.
6. Methodological Limitations: The methods used in this study may have certain limitations, such as the use of statistical models that do not include all relevant

factors or problems in modeling.

7. **General Limitations:** This study may have more general limitations related to analytical methods, sample selection, and data sources. In interpreting research results, it is important to consider these limitations so that the research results can be interpreted wisely and carefully.

5.4. Recommendations

Based on the results of research regarding the influence of regional head characteristics on regional government investment and the level of regional independence during the 2017-2021 period, the following are several recommendations that can be considered:

1. **Further Analysis:** It is recommended to carry out a more in-depth analysis regarding the characteristics of regional heads who have a significant influence on regional government investment and the level of regional independence. This can help in better understanding the specific factors at play.
2. **Leadership Development:** Based on the findings that regional heads' leadership influences investment and the level of independence, it is recommended to develop training and leadership development programs for regional heads. This can help them make better decisions regarding resource allocation.
3. To increase local government investment, incentives and policies need to be considered that can encourage investors, both local and foreign, to invest in the area. This includes facilitating licensing and reducing bureaucratic obstacles.
4. Following this research, it is recommended to conduct further studies involving external factors such as the global economic situation which may also influence investment and the level of regional independence.
5. Increasing transparency and accountability in the use of regional government budgets is an important step in increasing the level of regional independence. The public must be given greater access to information and oversight of the use of public funds.

These recommendations can be a starting point for understanding how the characteristics of regional heads can influence investment and the level of regional independence. However, it is important to always consider the local context and political dynamics of each region in implementing these recommendations.

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