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Article

Value for money financial governance, level of investment, and quality of regional development in Indonesia

Rediyanto Putra[1,*], Pujiono[1], Rohmawati Kusumaningtias[1], Oryza Ardhiarisca[2], Rahma Rina Wijayanti[2]

[1] Accounting Study Program, Faculty of Economics and Business, Universitas Negeri Surabaya, Surabaya 60231, Indonesia
[2] Public Sector Accounting Study Program, Business Department, Politeknik Negeri Jember, Jember 68101, Indonesia
*** Corresponding author:** Rediyanto Putra, rediyantoputra@unesa.ac.id

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Abstract: Introduction/Main objectives: This study aims to test the influence of the application of the concept of value for money on regional government financial management at the quality level of regional development, which is determined by the level of foreign and domestic investment in local governments. **Background problems:** State the problem or economic/business phenomena studied in this paper and specify the research question(s) in one sentence. **Novelty:** This study has a research model that has yet to be widely carried out in Indonesia, namely, a moderated model regression analysis of the value concept for money on the quality of regional development with investment as a moderating variable. **Research methods:** This study uses data on financial performance, domestic and foreign investment levels, and human development index of 34 provincial governments from 2017 to 2021. This research data comes from the website of the Directorate General of Fiscal Balance, Ministry of Finance and the Central Bureau of Statistics. The data collected in this study is then analyzed using moderated regression analysis (MRA) with the SPSS ver 23.0 application. **Findings/Results:** The findings in the research show that the application of value for money (economics, efficiency, and effectiveness) from local government financial governance can influence the quality of regional development in Indonesia's provinces in 2017–2021. In addition, the existence of foreign and domestic investment in the provincial government also strengthens the influence of value-for-money financial governance on the quality level of regional development in the provincial government. **Conclusion:** Based on existing research, local government financial management applies the concept that value for money needs to be increased to create optimal public services to improve the quality of human development in the regions. Regional governments are also expected to be able to encourage the level of capital investment both domestically and abroad to support the creation of development that can strengthen the quality of regional development in the regions.

Keywords: human development index; investment; value for money
JEL Classification: G18; G30; H50

1. Introduction

Financial performance and service quality in the public sector have always been topics of discussion over the last decade. This can happen because of the potential for a public budget deficit and the high interest in improving public service quality (Dalingwater, 2014; Půček et al., 2004). Measurement of the performance of local government financial governance aims to determine the quality of financial governance that has been carried out. Performance measurement is essential for the management control process in both the private and public sectors. Performance measurement can also be used to assess the accountability of organizations and managers in public services so that they not only report the use of public money for

implementing activities but also provide information on the efficient and effective use of public money. There is pressure from the public, causing public sector organizations to be asked to improve public services and continue to improve their performance (Barzelay, 2002; Brignal and Modell, 2000; Lane, 2000; Pollitt and Bouckaert, 2000). This condition ultimately demands a comprehensive measurement of the performance of the public sector.

The values concept for money (VFM) is appropriate for financial governance because it emphasizes three aspects: economy, efficiency, and effectiveness. Glendinning (1988) explains three aspects of the VMF concept. The economic aspect emphasizes the provision of an output based on a specific policy and time at a minimum cost, while efficiency is the achievement of maximum output from the resources owned to meet needs, and effectiveness is the achievement of results that are want to achieve in full from the use of resources. Values concept for money is an essential concept in public sector organizations, so the process of measuring public sector performance must also be based on this concept, which emphasizes economic, efficiency and effectiveness aspects (Mahmudi, 2015). Mahmudi (2007) in Halim and Kusufi (2013) explains that the concept of value for money also means appreciating the value of money, where every rupiah deserves to be appreciated and appropriately used. Value for money can increase public sector organizations' accountability and improve government performance quality (Geoffrey et al., 2002). Thus, applying the concept of value for money can help achieve good governance in public sector organizations and local governments.

The issue of financial governance based on the concept of value for money and the quality of development in local governments in Indonesia continues to be a topic of focus for various parties. One of the reasons is the occurrence of cases in local governments disclosed by the Supreme Audit Agency (BPK). The online media Kompas.com said that in 2020, the Supreme Audit Agency of the Republic of Indonesia revealed 5480 cases related to central budget management problems and 4094 cases involving local governments. These cases include weaknesses in the internal control system, non-compliance, dominance of waste, inefficiency, and financial ineffectiveness. These cases have caused losses of approximately IDR 1.35 trillion (Kompas, 2020). The existence of this local government financial governance case ultimately has an impact on the quality of regional development in Indonesia.

Table 1. Development of HDI and Indonesian components.

Information	**2017**	**2018**	**2019**	**2020**	**2021**
Human Development Index	70.18	71.39	71.92	71.94	72.29
HDI indikator					
Life Expectancy while alive	71.06	71.20	71.34	71.47	71.57
Old School Hope	12.85	12.91	12.95	12.98	13.08
The average length of the school	8.10	8.17	8.34	8.48	8.54
Expenditure per capita per year	10,664	11,059	11,299	11,013	11,156

Source: Central Bureau of Statistics 2021.

Table 1 shows data on the development of the Human Development Index and its constituent indicators for the last five years in Indonesia. The data in **Table 1** shows

that the increase in the HDI and its constituent indicators over the last five years has been insignificant. The increase for Indonesia's HDI for five years on average is 0.53. Furthermore, if you look at the data regarding the increase in the forming indicators of HDI, you will see the same conclusion that there has been no significant change. Thus, Indonesia's HDI status is currently still in the high category. The achievements of this HDI category have remained the same from 2011 to 2021, so efforts to improve the quality of development by increasing the HDI to a very high category still require arduous efforts. This condition shows that the quality of development in regions in Indonesia needs to run optimally. This argument arises from the value of the Indonesian state budget for 2017–2021 and the regional budget of each provincial government in Indonesia during 2017–2021, which has a tremendous value that should produce maximum development improvements.

The influence of financial governance on the quality of development in the regions has been carried out by several previous studies (Habbe, 2020; Indramawan, 2018; Suranta et al., 2019). Previous studies have varied results, where Suranta et al. (2019) regional financial performance influences the quality of regional development. However, research from Habbe (2020) has yet to find any influence of regional financial performance on development quality. Indramawan (2018) also found that effectiveness does not affect development quality. This explanation shows that the research is related to the relationship between value for money, level of investment, and quality of regional development needs to be done.

The difference between this research and previous research lies in testing the influence of value implementation for money on regional financial governance and the level of investment in the quality of regional development. In addition, this study also examines the moderating effect of the level of investment on the effect of value for money on financial governance and the quality of regional development in Indonesia. This research model still needs to be carried out both in Indonesia and outside Indonesia. This is because several previous studies that have been conducted rarely use the investment variable as a moderating variable (Putra et al., 2022). Investment is considered an essential variable in determining the quality of development in the regions based on several results from previous studies, which state that foreign and domestic investments influence the quality of regional development (Feriyanto, 2016; Gokmenoglu et al., 2019; Putra et al., 2022).

This study's results have contributions from theoretical, practical and policy aspects. The contribution of research results to the theoretical aspect supports strengthening the implementation of the value theory for money to continue to be carried out in local government financial management to support good governance. In addition, the results of this study can also be a reference for future researchers to conduct research with a similar theme. The results of this study have a contribution from the practical aspect, namely as material for the evaluation of provincial and regional government financial management practices that occurred in Indonesia during 2017–2021. Thus, local governments can evaluate the impact of financial management and regional development and the importance of investment for provincial and regional governments in supporting the creation of maximum regional development. Finally, the results of this study can also contribute to policy aspects, namely becoming the basis for the creation of new regulations for the government to

be able to support the birth of regulations that ensure the implementation of local government financial governance that places more emphasis on value for money and an increase in regional investment to support regional development.

The following section consists of the literature section reviews, method, results and discussion, conclusion, implication, and limitation. In the literature section, the review explains the explanation of the grand theory and the development of research hypotheses that will be tested in this study. The method section describes the research methods used to answer the research hypothesis. Results section and The discussion contains an explanation of the results of the data analysis that has been carried out, and the discussion is based on the theory and results of previous research. The conclusion, implication, and limitation sections contain an explanation of the conclusions obtained from the results of the data analysis that has been carried out and their implications for theory, practice, and policy. In addition, this section also explains the limitations of this study and suggestions for further research.

2. Literature reviews

2.1. Agency theory in the public sector

Agency theory is the oldest and most commonly used theory to codify agency relationships as a form of social interaction. Agency theory assumes that there is an information asymmetry between two parties in a particular decision-making, so there are those referred to as agents, namely parties who act on behalf of other parties referred to as principals (Budnik and Przeddanska, 2017). The agency relationship that occurs is based on the condition of one party that is dependent on another party. An agency relationship is a contract in which the principal involves another person, namely the agent, to carry out a particular responsibility on his behalf by delegating the right to make decisions (Jensen and Meckling, 1976). Agency theory has three basic assumptions, namely (a) principle operating efficiency is determined from agent decisions; (b) decisions made by parties in conditions of uncertainty and risk; (c) principals and agents have conflicting objectives to some extent (Daly, 2015; Eisenhardt, 1989).

From an economic perspective, agency relations focus on optimization, which is strictly carried out by selecting appropriate legal and organizational solutions to minimize the occurrence of information asymmetry and increase agent activity to be consistent with principal expectations. Problems that occur in agency relationships, for example, are conflicts of interest between principals and agents to a certain extent to achieve their respective goals (Laffont and Martimort, 2002). Conflicts can occur because the agent has information superiority, so the principal makes a complete contract.

Agency relations in the public sector occur when there is a relationship between the public as the principal and the government as the agent. The agency relationship that occurs between the community and the government, consciously or not, is genuine (Abdul and Abdullah, 2005). Bergman and Lane (1990) stated that agency theory can be applied in public organizations that occur in modern democracies. One clear evidence of agency relationships in the public sector is the demand for accountability as a form of government accountability to the public. Thus, as an agent, the

government must manage all of its activities optimally to maximize the fulfilment of society's interests as a principal party.

2.2. Value for money concept

The values concept for money (VFM) is used to create a form of financial governance. VFM is used in both public and private sector organizations for decision-making. The meaning of the VFM concept itself still needs to be explained and presented explicitly in various academic literature related to public policy (Heald, 2003; Khadaroo, 2008). VFM is better known or seen as a form of cost-effectiveness effort, although it is often misinterpreted as cost reduction. Grimsey and Lewis (2005) explained that the VFM concept is often understood as a reduction and low-cost effort in the public sector procurement process. The values approach for money focuses on economic aspects (the process of using minimum resources), efficiency (using resources well to produce maximum output), and effectiveness (using resources to achieve predetermined goals).

Values concept for money is an essential concept in public sector organizations, so the process of measuring public sector performance must also be based on this concept, which emphasizes economic, efficiency and effectiveness aspects (Mahmudi, 2015). Mahmudi (2007) in Halim and Kusufi (2013) explains that the concept of value for money also means appreciating the value of money, where every rupiah deserves to be appreciated and used correctly. Value for money can increase public sector organizations' accountability and improve government performance quality (Geoffrey et al., 2002). Thus, the application of the concept of value for money can help achieve good governance in public sector organizations and local governments.

2.3. Research hypothesis development

The performance of an organization is an important aspect in the implementation of operational activities. Organizational performance becomes a benchmark for all actions taken during a certain period. Measuring the performance of public organizations ultimately needs to be measured to assess the quality of the use of the budget used to provide services to the public. Mahmudi (2010) said that performance measurement is a tool to determine the success of an organization. This success can become legitimacy and public support for public sector organizations. Communities will have a positive response when public sector organizations can provide quality public services and are relatively inexpensive. Therefore, public sector organizations are required to be able to use the budget economically, effectively and efficiently.

Economical, effective and efficient concepts in the use of organizational finances are often known as value for money. The concept of value for money is an important concept in public sector organizations, so the process of measuring the performance of the public sector must also be based on this concept which emphasizes economic, efficiency and effectiveness aspects (Mahmudi, 2015). Mahmudi (2007) in Halim and Kusufi (2013) explains that the concept of value for money also has a meaning for respecting the value of money, where every rupiah deserves to be appreciated and used accordingly. Value for money can increase the accountability of public sector organizations and improve the quality of government performance (Goeffrey et al., 2002). Thus, the application of the concept of value for money can help achieve good

governance in public sector organizations and local governments. Based on the explanation, this study will test several research hypotheses based on the following:

H_1: Economical financial governance will create a better quality of development.

H_2: Efficient financial governance will create a better quality of development.

H_3: Effective financial governance will create a better quality of development.

Economic growth is an essential factor for various local governments in Indonesia. A growing economy is characterized by the ability to deliver economic goods to large populations based on technology, institutional change, and trust (Kuznets, 1973). A growing economy is a form of successful regional development process. Viddy et al. (2019) explained that economic growth indicates a country's welfare. The growth economy is the most powerful phenomenon. For the production level, the life period is long. This is because the growth economy is a very complex process and is influenced by many factors, such as institutional, policy, social, and cultural factors (Mihalea and Georgiana, 2015).

Economic growth is based on the demand and supply sides. The demand side is affected by viz request family to goods & services (output) consisting of from expenditure consumption family C), expenses funding gross private and government (i), expenses government (G), and exports net (XM) (Maqin and Sidhartha, 2017). Furthermore, on the supply side, economic growth is influenced by factors such as ownership of capital, labour, natural resources, and technology.

Economic growth and regional development results can be seen from the human development in the area. The quality level of human development resulting from economic growth and regional development can be seen from the regional Human Development Index (HDI). This HDI is a product resulting from a model of human development that focuses on everyday human experiences in economic, social, legal, psychological, cultural, environmental, and political processes (Khodabakhshi, 2011). The concept of human development is a concept that explains the process by which humans can have a long and healthy life, have access to knowledge, enjoy a decent standard of living and participate in decisions that affect them (Khodabakhshi, 2011). HDI combines four leading indicators: life expectancy for health, expected school years, average length of study for education, and gross national income per capita for standard of living (Viddy et al., 2019). Based on the explanation, this study will test several research hypotheses based on the following (See **Figure 1**):

H_4: A high level of foreign investment will create a better quality of development.

H_5: A high level of domestic investment will create a better quality of development.

H_6: The level of foreign investment moderates the effect of economic and financial governance on the quality of regional development.

H_7: The level of foreign investment moderates the effect of efficient financial governance on the quality of regional development.

H_8: The level of foreign investment moderates the effect of effective financial governance on the quality of regional development.

H_9: The level of domestic investment moderates the effect of economic and financial governance on the quality of regional development.

H_{10}: The level of domestic investment moderates the effect of efficient financial governance on the quality of regional development.

H_{11}: The level of domestic investment moderates the effect of effective financial governance on the quality of regional development.

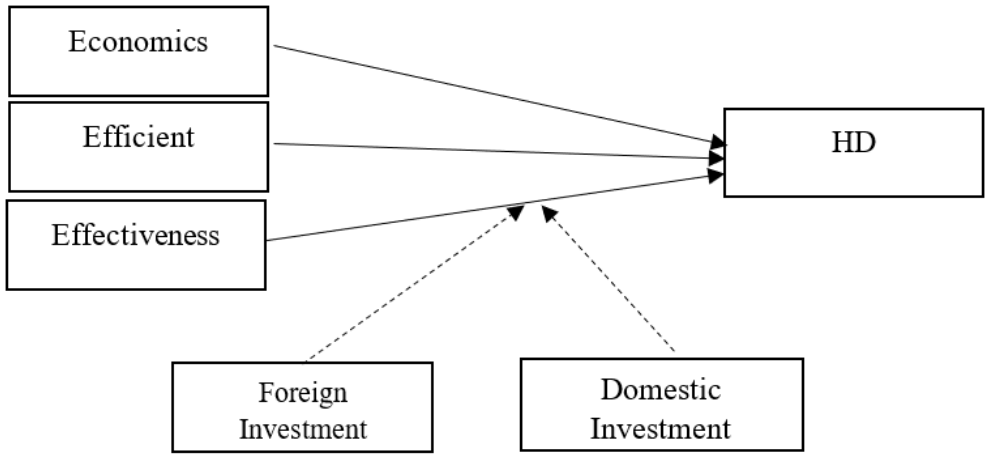

Figure 1. Research models.

Notes:
——▶ : direct influence
- - - - - - ▶ : moderating effect

3. Method, data, and analysis

This quantitative research wants to test the influence of value for money on local government financial governance on the quality level of regional development. In addition, this study also wants to test the moderating effect of foreign and domestic investment on the effect of value for money on local government financial governance on the quality level of regional development. The research data used is secondary data, namely (1) financial data from provincial governments in Indonesia in 2017–2021, (2) data on the quality of regional development from the provincial government in 2017–2021, (3) and foreign and domestic investment data in provincial government from 2017–2021. The research data used comes from the Directorate General of Fiscal Balance and the Indonesian Central Bureau of Statistics website. The data collection technique used in this study is the documentation technique.

This study has three types of variables: the variable quality of regional development, which is the dependent variable (*Y*), and the independent variable (*X*), namely the variable value for money, which consists of economic, efficiency, and effectiveness aspects. The next is the moderating variable (*Z*), namely, foreign investment and domestic investment variables. The measurement ratios carried out in this study are as follows (in **Table 2**).

Table 2. Operational definition and variable measurement.

Variable	Measurements	References	Scale
Quality of regional development (*Y*)	Percentage of the Human Development Index of provincial governments in Indonesia	Basri (2018)	Ratio
Ratio Economical (*X*1)	$\frac{\text{Realization of regional expenditure}}{Regional\ expenditure\ budget} \times 100\%$	Basri (2018)	Ratio
Ratio Effectiveness (*X*2)	$\frac{Realisation\ of\ local\ revenue}{Local\ revenue\ budget} \times 100\%$	Mahmudi (2018)	Ratio

Table 2. (*Continued*).

Variable	Measurements	References	Scale
Ratio Efficiency (*X*3)	$\frac{Realization\ of\ regional\ expenditure}{Local\ revenue\ realization} \times 100\%$	Halim (2007)	Ratio
Foreign Investment (*Z*1)	Natural logarithm of the amount of foreign investment in each province in Indonesia (in thousands of USD)	Putra et al. (2022)	Ratio
Domestic Investment (*Z*2)	Natural logarithm of the amount of foreign investment in each province in Indonesia (in millions of rupiah)	Putra et al. (2022).	Ratio

Source: Data processed by researchers.

Research data collected in this study was then analyzed using quantitative methods consisting of descriptive statistical tests, classical assumption tests, and hypothesis testing using Moderated Regression Analysis (MRA). Data analysis was carried out using the SPSS application version 23.0. The regression model in this study is as follows.

Model 1:

$$HDI = \alpha + \beta_1 ECONOMICS + \beta_2 EFFICIENT + \beta_3 EFFECTIVE + \beta_4 FOREIGN + \beta_5 DOMESTIC + \varepsilon$$

Model 2:

$$HDI = \alpha + \beta_1 ECONOMICS * FOREIGN + \beta_2 EFFICIENT * FOREIGN + \beta_3 EFFECTIVE * FOREIGN + \varepsilon$$

Model 3:

$$HDI = \alpha + \beta_1 ECONOMICS * DOMESTIC + \beta_2 EFFICIENT * DOMESTIC + \beta_3 EFFECTIVE * DOMESTIC + \varepsilon$$

Notes :

HDI = Quality of regional development

ECONOMICS = Values for money economic aspects

EFFICIENT = Value for money efficiency aspect

EFFECTIVE = Value for money aspects of effectiveness

FOREIGN = Foreign investment

DOMESTIC = Domestic investment

4. Results and discussion

4.1. Sampling process

The population in this study is the provincial government in Indonesia. Furthermore, the sampling process in this study was carried out by purposive sampling. The purposive sampling process is carried out using several criteria, namely (1) provinces in Indonesia that exist from 2017 to 2021 and (2) provinces that have the data needed in the study and are available on the website of the Directorate General of Fiscal Balance (DJPK) and the Central Statistics Agency. Based on the results of the sampling process that has been carried out, it shows that there are 34 provincial governments that have research data during 2017–2021. Thus, the number of observations made in this study was 170 observations.

4.2. Descriptive statistics

The first is a descriptive statistical test, which describes the research data collected in this study. **Table 3** presents the minimum, maximum, mean and standard deviation values of each variable in this study.

Table 3. Descriptive statistics.

Variable	Observation	Minimum	Maximum	Means	std. Deviation
IPM	170	0.590	0.81	0.707	0.0397
Economical	170	0.650	1.04	0.931	0.057
Efficiency	170	0.0634	0.545	0.261	0.1628
Effectiveness	170	0.800	1.180	0.988	0.0610
Ln_InvestLN	170	1.770	8.68	5.770	1.6221
Ln_InvestDN	170	3.930	11.04	8.453	1.454

Source: SPSS output.

The table above shows the results of the descriptive statistical tests carried out in this study. The number of observations made was 170, namely 34 provinces in 5 years (2017–2021). The variable quality of regional development proxied by the human development index (IPM) shows that it has the lowest value of 0.590, and the highest is 0.81 with an average of 0.707. The lowest HDI score was owned by Papua in 2017, and the highest HDI score was owned by DKI Jakarta in 2019. Furthermore, the average HDI value based on observations that have been made concludes that the quality of regional development in provinces in Indonesia during 2017–2021 is in the high range.

The second variable is the value variable for money related to economic aspects. Based on observations that have been made, as many as 170 observations show that the economic aspect has the lowest value of 0.65 and the highest is 1.04, with an average of 0.931. DKI Jakarta has the lowest score for the economic aspect in 2021, while the highest score for the economic aspect is NTB in 2017. Furthermore, the average value for the economic aspect shows that most provinces in Indonesia during 2017–2021 have carried out financial management in an independent manner. It is economical because it has a value of less than 100%.

The third variable is the value variable for money-related aspects of efficiency. Based on observations that have been made, as many as 170 observations show that the efficiency aspect has the lowest value of 0.0634 and the highest is 0.545 with an average of 0.261. The lowest score for the efficiency aspect was owned by DKI Jakarta in 2020, while the highest score for the efficiency aspect was owned by NTT in 2018. Furthermore, the average value for the efficiency aspect shows that most provinces in Indonesia during 2017–2021 have carried out financial management very efficiently because it has a value of less than 60%.

The fourth variable is the value variable for money-related aspects of effectiveness. Based on observations that have been made, as many as 170 observations show that the effectiveness aspect has the lowest value of 0.80 and the highest is 1.18, with an average of 0.988. Jambi had the lowest effectiveness in 2020, while West Papua had the highest in 2019. Furthermore, the average value of the

effectiveness aspect shows that most provinces in Indonesia during 2017–2021 have managed their finances properly. It is effective because it has a value of less than 100.

The fifth variable is foreign investment. Based on observations that have been made, as many as 170 observations fore,ign investment has the lowest value of 1.77, and the highest is 8.68 with an average of 5.77. The lowest value of foreign investment is owned by West Sulawesi in 2021, while the highest value of foreign investment is owned by West Java in 2019.

The last variable is domestic investment. Based on observations that have been made, as many as 170 observations show that the domestic investment variable has the lowest value of 3.93 and the highest is 11.04, with an average of 8.453. The lowest value of the domestic investment variable was owned by West Papua in 2018, while the highest value of domestic investment was owned by DKI Jakarta in 2019.

4.3. Classic assumptions test

The first classic assumption test is the normality test, intended to determine whether the research data distribution has a standard distribution. A good research data distribution is if it is usually distributed. The basis for decision-making in this normality test is determined from the significance value resulting from the Kolmogorov test Smirnov. If the resulting significant value is more than 0.05, then the data is usually distributed. **Table 4** shows that Smirnov's Kolmogorov test results have a significance value of 0.146, which means more than 0.05. Thus, the data in this study has a normal data distribution.

Table 4. Normality test results.

		Unstandardized residual
N		170
Normal Parameters [a,b]	Means	0.000
	Std. Deviation	0.02922
Most extreme Differences	absolute	0.088
	Positive	0.088
	Negative	−0.063
Kolmogorov-Smirnov Z		1.145
Asymp. Sig. (2-tailed)		0.146

Source: SPSS output.

The next test of the classic assumption test is the multicollinearity test, which aims to determine whether there is a linear relationship between each independent variable in a research model. A good research model is a model that does not experience multicollinearity symptoms. The basis for determining whether or not multicollinearity symptoms occur is determined from the tolerance value and the Variance value Inflation Factor (VIF). The tolerance value must be more than 0.1, and the VIF value must be less than 10. **Table 5** shows that each variable's tolerance and VIF values are more than 0.1 and less than 10. Therefore, this research model is free from multicollinearity symptoms.

Table 5. Multicollinearity test.

Variable	Tolerance	VIF
Effectiveness	0.441	2.266
Efficiency	0.794	1.260
Economical	0.435	2.301
Ln_InvestDN	0.595	1.680
Ln_InvestLN	0.680	1.471

Source: SPSS output.

The third test of the classic assumption test is the autocorrelation test, which aims to know whether a regression model correlates with the confounding errors in period t and the previous period $t - 1$. This autocorrelation test is determined by looking at the Durbin value Watsons. There is no autocorrelation symptom if the DW value is between −2 and +2. In this study, based on the autocorrelation test that had been carried out, it was found that the DW value owned was 0.728, so it was between − 2 and +2. Therefore, the regression model in this study is free from autocorrelation symptoms.

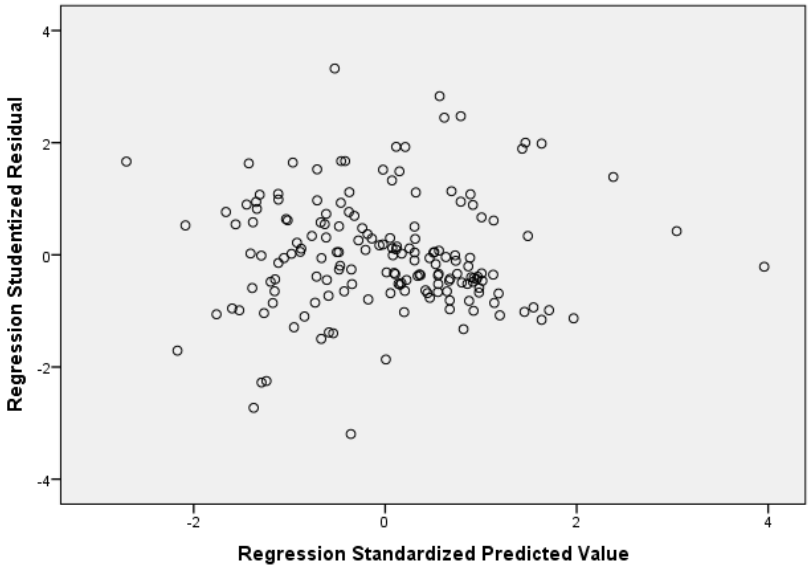

Figure 2. Scatter plots.

Source: SPSS output.

The last test of the classic assumption test is the heteroscedasticity test (**Figure 2**), which is intended to determine whether there is an inequality of the variance of the residuals for all observations in a regression model. A good regression model is homoscedastic. The basis of the heteroscedasticity test in this study is based on scatterplot images. The image above shows that the results of the scatterplot show dots that are spread out and do not form a specific pattern. Therefore, in this study, the regression model is free from symptoms of heteroscedasticity.

4.4. Hypothesis testing

Table 6. Research hypothesis test results.

Connection	Coefficient	*t* count	Significance	Information
ECONOMICS → HDI	−0.341	−5.627	0.000	H1 accepted
HDI EFFICIENCY→	−0.067	−4.254	0.000	H2 accepted
EFFECTIVE → HDI	0.194	3.445	0.001	H3 accepted
FOREIGN → HDI	0.003	1.829	0.035	H4 accepted
DOMESTIC → HDI	0.01	5.139	0.000	H5 accepted
ECONOMICS × FOREIGN → HDI	−0.045	−4.427	0.000	H6 accepted
EFFICIENCY × FOREIGN → HDI	−0.015	−5.510	0.000	H7 accepted
EFFECTIVE × FOREIGN → HDI	0.046	5.037	0.000	H8 accepted
ECONOMICS × DOMESTIC → HDI	−0.027	−3.902	0.000	H9 accepted
EFFICIENCY × DOMESTIC → HDI	−0.009	−4.304	0.000	H10 accepted
EFFECTIVE × DOMESTIC → HDI	0.033	5.374	0.000	H11 accepted
Coefficient of Determination (R^2) Model 1	0.441			
Coefficient of Determination (R^2) Model 2	0.281			
Coefficient of Determination (R^2) Model 3	0.335			

Source: SPSS output.

Hypothesis testing in this study was carried out on 11 research hypotheses derived from the three models in this study. The first regression model is intended to answer the first to fifth research hypotheses (H_1–H_5). Furthermore, the second and third regression models are regression models with moderating variables used to answer the sixth to eleventh research hypotheses (H_6–H_{11}).

Table 6 shows that the research hypothesis H_1–H_5 is accepted based on the calculated *t*-value and the significance at the 5% and 10% significance levels. Thus, this study finds from the acceptance of the H_1–H_3 hypothesis that value for money in financial governance, which is shown through the economic aspects, efficiency, and effectiveness, influences the level of success of regional development. The more economical, efficient, and compelling the management of local government financial governance, the better the level of regional development, as indicated by the level of the Human Development Index. Furthermore, the conclusion that can be drawn from the acceptance of hypotheses H_4–H_5 is that a province with a high level of foreign and domestic investment will be able to produce better regional development marked by a high level of Human Development Index. The coefficient of determination of the regression model 1 shows a value of 0.441 (44.1%), where this value indicates that the independent variable in the regression model 1 can explain the change in the value of the dependent variable by 44.1% and the rest is explained by other variables not included in the in models.

The table above also shows that the research hypothesis H_6–H_{11} is accepted based on the calculated *t*-value and the significance that is at the 5% significance level. Thus, this study finds from the acceptance of the H_6–H_{11} hypothesis that foreign investment and domestic investment can determine the level of influence of the economy, efficiency, and effectiveness of regional financial management on the quality of

regional development. Thus, provincial and regional governments must also pay attention to the level of investment in a province because this can also be a source of support for achieving maximum quality regional development. The coefficient of determination of the regression models 2 and 3 shows a value of 0.281 (28.1%) and 0.335 (33.5%), where this value indicates that the independent variable in the regression models 2 and 3 can explain the change in the value of the dependent variable by 28.1% and 33.5% and the rest is explained by other variables not included in the model.

4.5. Discussion

This study found several significant findings. The first finding in this study is the influence of the concept of value for money, namely economic aspects, efficiency and efficiency as well as foreign and domestic investment, on the quality of regional development proxied by the level of the Human Development Index (HDI). The second finding is that foreign and domestic investment has a moderating effect on the influence of the concept of value for money, namely economic aspects, efficiency, and the quality of regional development.

Value concept for the economic aspect of money in this study is proxied by the realization of local government spending with the local government spending budget. The results of the tests found that the coefficient and significance values of the economic influence on HDI were −0.341 and 0.000. These results indicate that the smaller the ratio of actual local government spending to the government spending budget (the more economical), the higher the HDI. Thus, local governments must be able to produce good quality regional development to create a high HDI without wasting it.

Values concept for the money efficiency aspect in this study is proxied by the realization of local government spending and revenue. The results of the tests found that the coefficient and significance values of the effect of efficiency on HDI were −0.067 and 0.000. These results indicate that the smaller the comparison between the realization of local government spending and government revenue (the more efficient it is), the higher the HDI will be. Thus, local governments must be able to produce good quality regional development to create a high HDI with the maximum use of resources so that the resulting output is also maximized.

Values concept for the money effectiveness aspect in this study is proxied by the realization of local government revenues with the local government revenue budget. The results of the tests found that the coefficient and significance values of the effect of the level of effectiveness on HDI were 0.194 and 0.001. These results indicate that the greater the ratio of actual local government revenue to the local government revenue budget (the more effective), the higher the HDI. Thus, local governments must be able to use their resources to the fullest to achieve the targeted goal of producing good quality regional development to create a high HDI.

Foreign investment in this study is proxied by the natural logarithm of the province's foreign investment. The results of the tests found that the coefficient and significance values of the economic influence on HDI were 0.003 and 0.035, respectively. These results indicate that the greater the level of foreign investment, the

higher the HDI. Thus, local governments must be able to invite investment from outsiders to produce good public services to create a high HDI.

Domestic investment in this study is proxied by the natural logarithm of the province's domestic investment. The results of the tests found that the coefficient and significance values of the effect of domestic investment on HDI were 0.01 and 0.000. These results indicate that the greater the domestic investment, the higher the HDI. Thus, local governments must be able to invite investment from outsiders to produce good public services to create a high HDI.

Foreign and domestic investment in this study was found to have a moderating effect on the economic influence, efficiency, and effectiveness of local government financial management on the quality of regional development. The results of the tests found that the coefficient value of the moderating influence of foreign and domestic investment on the economic influence, efficiency and effectiveness of local government financial management on the quality of regional development is all negative and has a significance of 0.000. These results indicate that increasing foreign and domestic investment weakens local government financial management's economic efficiency and effectiveness on the quality of regional development. This is because foreign and domestic investments can become additional funds outside local government finances that can be used to support regional development programs. Therefore, government spending on the implementation of regional development will decrease.

The results of this study strengthen the explanation of agency theory in the public sector. Agency theory assumes that there is an information asymmetry between two parties in a particular decision-making, so there are those referred to as agents, namely parties who act on behalf of other parties referred to as principals (Budnik and Przeddanska, 2017). Problems that occur in agency relationships, for example, are conflicts of interest between principals and agents to a certain extent to achieve their respective goals (Laffont and Martimort, 2002). The influence of values for money in financial governance, which consists of economy, efficiency, and effectiveness on the quality of regional development, proves that the application of value for money can solve problems between principals (community) and agents (government) related to conflicts of interest. Promising results from the quality of regional development prove that the government, as an agent, has used the entrusted resources to produce output according to the community's wishes (principal). Values concept for money can be a measure of local government performance in agency relations because the process of measuring public sector performance is based on the concept of value for money and emphasizes economic, efficiency and effectiveness aspects (Mahmudi, 2015). Additionally, values for money can increase the accountability of public sector organizations and improve the quality of government performance (Geoffrey et al., 2002). Thus, applying the concept of value for money can help achieve good governance in public sector organizations and local governments.

The results of this study also strengthen the theory of economic growth and human development models. Findings showing the influence of foreign and domestic investment on the quality of regional development and the moderating effect of foreign and domestic investment on the influence of the concept of value for money on the quality of regional development support the argument that economic growth is based

on the demand and supply sides. The demand side is affected by viz request family to goods & services (output) consisting of from expenditure consumption family C), expenses funding gross private and government. (i), expenses government (G), and exports net (XM) (Maqin and Sidhartha, 2017). The quality of regional development resulting from the influence of investments that have a real impact can be seen from the human development in the area. The concept of human development is a concept that explains the process by which humans can have a long and healthy life, have access to knowledge, enjoy a decent standard of living and participate in decisions that affect them (Khodabakhshi, 2011). HDI combines four leading indicators: life expectancy for health, expected school years, average length of study for education, and gross national income per capita for standard of living (Viddy et al., 2019).

The results of this study strengthen the explanation of agency theory, economic growth theory, and human development models and are also by the results of research from Suranta et al. (2019). The two results of these studies found that regional financial performance influences the quality of regional development. However, the results of this study do not support the results of research from Habbe (2020) and Indramawan (2018), which found no effect of regional financial performance on the quality of development.

5. Conclusion

This study aims to test whether there is an influence of the implementation of the value concept for money from financial governance and the level of investment in the regions on the quality of regional development. In addition, this study also aims to examine the moderating effect of foreign and domestic investment on the effect of implementing the value concept for money from financial governance to the quality of regional development. The results of the research that has been done conclude that local government financial governance maximally applies the concept of value for money, and a high level of investment will result in a better quality of regional development. In addition, the results of this study also conclude that foreign and domestic investments have weakened the influence of the concept of value for money on the quality of regional development. This is because regional investment will become additional funds in the regional development process so that the proportion of funds (government spending) for regional development can be reduced. Thus, the results of this study strengthen the explanation of agency theory in the public sector, economic growth theory, and human development models.

6. Implications/limitations and suggestions

The results of this study indicate that provincial regional financial management in Indonesia during 2017–2021, which is carried out economically, efficiently, and effectively, will lead to a better quality of regional development. The study's results also found that the level of foreign and domestic investment also determines the quality of regional development and weakens the effect of applying values for money financial governance on the quality of regional development. Therefore, the results of this study imply that the provincial government should manage finances using the concept of value for money and increase investment in the province to the maximum.

This is because financial governance is carried out by the concept of value for money, and a high level of investment in a provincial area can produce facilities and infrastructure to support better public services to the community. This will later impact the regional development process through development in health, education, and a decent standard of living. An increase in the human development index marks the results of this regional development.

The results of this study can be accepted while considering the limitations of existing research. The limitations of this study are that the results of this study are in the 2017–2021 period, where in 2020 and 2021, the COVID-19 pandemic occurred, which could affect the research results, primarily related to the level of investment and financial performance due to a decrease in economic activity during the COVID-19 pandemic. Thus, future research must pay attention to these conditions related to selecting the research period for further research.

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