

# The Influence of Village Fund Use on The Welfare of The Bintuas Village Community, Mandailing Natal Regency: With Transparency as A Moderating Variable

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**Abstract.** This study aims to examine and determine the effect of the use of Village Funds on community welfare and to examine the role of transparency as a moderating variable in the relationship. This study uses a Quantitative research type with an Associative Causal Approach. The data source comes from Primary Data with Data Collection Techniques using questionnaires distributed via Google Forms. The population of this study is the community of Bintuas Village, Natal District, Mandailing Natal Regency, totaling 1,136 people, the sampling technique used was the Purposive sampling method using the Slovin formula with an error rate of 10% so that a sample of 91.90 was obtained which was rounded up to 92 respondents. Data analysis used to process the data of this study is Using Moderated Regression Analysis (MRA) with the help of the SPSS 26 program. The results of this study indicate that the use of village funds has a positive effect on community welfare. Transparency is proven to significantly moderate the relationship. An interesting finding is the negative direction of moderation, which indicates that a high level of transparency actually weakens the strength of the positive influence of the use of village funds on welfare. This is interpreted as a trade-off between the demands of formal accountability of high transparency, weakening the agility that has a direct impact on village spending.

**Keywords:** Bintuas Village, Community Welfare, MRA, Transparency, Village Fund Use

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## Introduction

Indonesia, as a country with a majority of its population living in rural areas, faces complex development challenges, particularly in equitable distribution of community welfare. The government has implemented a strategic policy in the form of a significant allocation of village funds since 2015 to encourage infrastructure development, community empowerment, and increased access to basic services (Mardalena et al., 2023). Since its initial allocation in 2015 amounting to IDR 20,766.2 billion, it has continued to increase to IDR 71 trillion in 2024, distributed to 75,259 villages across Indonesia. Based on data from the Ministry of Finance, during 2015-2024, Village Funds have been allocated amounting to IDR 609.9 trillion (DJPK, 2024). However, its effectiveness and impact on community welfare still show varying patterns among villages in various regions. This remains a strategic issue that requires special attention, demanding an adaptive approach and stricter supervision so that its benefits can be optimally felt by the community (Suryani, 2022).

The Village Fund was designed as a primary instrument to address development disparities between urban and rural areas, while simultaneously improving the welfare of rural communities through physical and non-physical development (Panda et al., 2021). However, inter-regional disparities and inefficient use of funds still frequently occur, resulting in the Village Fund's benefits not being fully felt equally by all villagers (Wildani et al., 2022).

A specific phenomenon in Bintuas Village, Natal District, Mandailing Natal Regency reflects this condition. This village is one of the villages that receives Village Funds annually, with funds coming in at Rp846,069,000 in 2024 and Rp701,387,000 in 2025. Based on initial observations, the level of community welfare in this village remains relatively low. Poverty indicators and community quality of life have not shown significant improvement, despite the regular allocation of village funds. This village is an example that represents the challenges of optimal village financial management, where there are indications of a gap between the allocation of Village Funds and the actual results on community welfare.

This challenge is increasingly pressing considering that 2024 data from the Central Statistics Agency (BPS) shows that the national rural poverty rate still reaches 11.03%, with significant regional disparities (inequality) in provinces such as North Sumatra, where Mandailing Natal Regency is included in the

area with a human development index (HDI) below the provincial average (BPS HDI K. Mandailing Natal, 2025). This inequality raises the urgency to identify factors that influence the conversion of fund allocations into welfare improvements, such as budget absorption efficiency and targeted program targeting. Without adaptive interventions (flexible budget policies), the potential IDR 71 trillion in annual Village Funds is at risk of not achieving the Sustainable Development Goals (SDGs) targets or sustainable development goals number 1 and 10 related to poverty alleviation and inequality reduction.

This is where transparency plays a crucial role as a moderating variable in the relationship between Village Fund use and community welfare. Transparency, which includes open budgeting information, real-time reporting through digital platforms such as the Village Information System (SID Desa), and village deliberation mechanisms, can strengthen the fund's effectiveness by encouraging community participation and accountability of village officials (Amin, A & Wulandari, 2025).

Theoretically, this research is based on Agency Theory and Good Governance Theory. Agency Theory provides a framework for understanding the principal-agent relationship, where the community, as the principal, places trust in the management of village funds to the village government, as the agent, who must carry out their mandate and be accountable for managing village funds in a transparent and accountable manner (Dika, 2022). Meanwhile, Good Governance Theory emphasizes the principles of participation, transparency, and accountability as keys to effective village governance that positively impacts community welfare (Desak, NLL, 2025). These two theories reinforce the importance of village fund management, which focuses not only on the amount of funds but also on aspects of management and information transparency that support public trust.

Previous research has shown that transparency and accountability significantly influence the effectiveness of Village Fund management and community welfare. Khasanah & Marisan, (2022) found that the use of Village Fund allocation, accountability, and transparency simultaneously have a positive effect on community welfare. Yonara et al., (2022) also showed that transparency and accountability in Village Fund management have a positive effect on community welfare in Bangka. Meanwhile, Asrul, (2023) emphasized that Village

Fund management and transparency simultaneously affect community welfare in Padang Pariaman. However, several studies, such as Sukmarani et al., (2025), stated that transparency in Village Fund management does not affect community welfare. Research by Dawali et al., (2025) concluded that Village Funds do not have a significant direct effect on community welfare or empowerment. Priyatama et al., (2025) also found that the use of Village Fund allocations does not significantly affect community welfare.

However, a research gap exists regarding the role of transparency as a moderating variable in the relationship between Village Fund use and community welfare. Most previous studies have only examined the direct impact of Village Funds or transparency on welfare, without specifically examining how transparency can strengthen or weaken the influence of Village Funds on community welfare (Khasanah & Marisan, 2022; Yonara et al., 2022; Asrul, 2023). Furthermore, quantitative research using a moderation approach at the village level, particularly in Bintuas Village, Mandailing Natal Regency, is still very limited and has not been widely studied.

The novelty of this research lies in the empirical examination of the role of transparency as a moderating variable in the relationship between Village Fund use and community welfare in Bintuas Village. This study also uses a quantitative causal associative approach with moderated regression analysis techniques, thus providing stronger and more relevant statistical evidence for policymaking at the village level. Thus, the research results are expected to complement the limitations of previous studies and provide new contributions to the development of public sector accounting and village financial governance.

The transparency variable is included as a moderating variable because the level of openness of the village government in managing and disseminating information on the use of village funds can strengthen or weaken the influence of village fund use on community welfare. This means that even though village funds have been used for development and community empowerment, the impact on welfare is not always the same if the transparency of management is low. Transparency allows the community to know, monitor, and participate in the use of village funds, so that their use becomes more targeted and accountable. Therefore, including transparency as a moderating variable is a research

contribution, because this study not only examines the direct relationship between the use of village funds and community welfare but also explains how the level of transparency can influence the strength of that relationship, resulting in a more comprehensive analysis model than previous research.

The problem formulation in this study is: (1) Does the use of Village Funds have a significant effect on the welfare of the Bintuas Village community? (2) Does transparency moderate the effect of the use of Village Funds on community welfare? The main objective of this study is to test and determine the effect of the use of Village Funds on community welfare and to test the role of transparency as a moderating variable in this relationship.

The main problem studied is how the effectiveness of Village Fund utilization impacts community welfare and how transparency can enhance or moderate this influence. The scope of the study is limited to a quantitative analysis of Village Fund utilization in terms of community access to basic services, infrastructure development, and economic empowerment, as well as the role of transparency in enhancing accountability and community participation. The variables analyzed consist of Village Fund Utilization, Community Welfare, and Transparency. The topic limitation is deliberately focused so that the research is directed at the causal relationship between these three variables without expanding to other aspects such as national policies or broader sectoral development. The study does not discuss other variables such as village official competence, legal constraints, or external macroeconomic factors in depth. This research limitation also avoids generalizing the results to other villages, because each village has unique social, economic, and governance conditions, making the results of this study more specific and contextual to Bintuas Village. The establishment of this limitation ensures the study remains focused and relevant, facilitates valid data collection, and produces sharp analysis according to the objectives.

Theoretically, this research is expected to enrich the literature on village financial governance, particularly regarding the role of transparency in increasing the effectiveness of Village Funds. Practically, the research findings can serve as a reference for village governments, Village Fund management officials, and other stakeholders in designing more transparent, accountable, and participatory policies to sustainably improve the welfare of village communities.

## Literature Review

### *Agency Theory*

The research used Agency Theory, developed by Jensen and Meckling (1976). This theory explains the relationship between the principal (the community as the owner of funds through taxes and the state budget) and the agent (village officials who manage Village Funds). In the context of Village Fund management in Indonesia, agency theory assumes the existence of information asymmetry and potential conflicts of interest, where agents may act opportunistically (for example, misuse of funds) if there is no oversight mechanism such as transparency. Transparency serves as a tool to reduce agency costs and information asymmetry (one party in a transaction has more information than the other party) ensuring the agent's accountability, and ultimately the use of Village Funds is more aligned with the welfare needs of the principal (the community). This Grand Theory explains that transparency (Z) is very necessary to ensure the use of Village Funds (X) is truly for the welfare of the community (Y).

### *Good Governance Theory*

Good Governance Theory developed by the World Bank (1992) and the United Nations Development Programme (UNDP, 1997), this theory emphasizes principles such as transparency, accountability, participation, and efficiency in the management of public funds. Research by Az-Zahra et al., (2023) In the context of Village Funds, Good Governance ensures that the use of funds is on target for infrastructure development, economic empowerment, and basic services, which directly impact community welfare. Transparency as a key element moderates the effectiveness of Village Funds by preventing corruption and increasing community participation. In Indonesia, this theory is relevant to Law Number 6 of 2014 concerning Villages, which demands transparent management of Village Funds to achieve village independence and welfare.

### *Use of Village Funds*

According to research by Syahputri et al., (2023) the use of Village Funds, from the State Revenue and Expenditure Budget (APBN) for village development which includes the allocation of funds for access to basic services (health, education), infrastructure

development and repair (roads, bridges, water channels, and other public facilities), and Community Empowerment to increase the economic capacity of the community, such as (skills training, capital for MSMEs, and development of BUMDes).

According to Pasaribu et al., (2023) effective management of Village Funds must be directed at development priorities that support community welfare. The use of Village Funds that is appropriately targeted will increase community access to basic services which ultimately contributes to improving community welfare. In order for village funds to be used appropriately and not misused, village officials need to implement the principles of accountability, effectiveness, and efficiency in fund management, so that they can be accounted for to the community and avoid potential budget misuse (Zannah et al., 2024). This variable is measured through indicators: poverty reduction, increasing access to basic infrastructure, food security, reducing stunting, and strengthening the local economy through BUMDesa and the realization of targeted BLT (Sulasmi & Anis Susanti, 2025).

### *Public Welfare*

Community Welfare, defined as improving the quality of life, including access to basic services, household economic conditions, and supporting infrastructure. According to Tuaty, (2023) Community welfare is a condition that indicates a measure of the standard of living reflected in the community's standard of living. Fulfilling basic needs reflected in adequate housing, adequate clothing and food needs, ease of access to health services and entry into education, or a situation where everyone can maximize their use within budget limits. Achieving prosperity is not easy, it requires a good program to implement it, one of which is the Village Fund Program. This program was designed by the Indonesian government to accelerate poverty alleviation in an integrated and sustainable manner and aims to achieve prosperity and independence in underdeveloped rural areas.

According to Sari et al. (2024) Community welfare is the extent to which a community can fulfill its basic needs, that is welfare. If a community can fulfill the needs in the form of a decent house, clothing, and adequate food, then the community is prosperous. Meanwhile, community welfare can also be determined by the size of development in an area If the infrastructure development of a village is

adequate, it can encourage the community to be more prosperous (Oktriawan et al., 2022) therefore Considering the importance of managing village wealth, the village government must manage village wealth well and on target and the economy must be managed so that the utilization of village wealth can achieve the economic welfare of the village community (Panjaitan et al., 2023). indicators in assessing community welfare, namely: income, education level, health services, demographic structure, employment level, tariffs and consumption patterns, housing conditions and the environment, poverty level (Sastrawan et al., 2024).

### *Transparency*

According to Andreani & Syafina, (2022) Transparency refers to a condition where a person, company, organization, agency, or institution is able to provide information openly to the public with the aim of ensuring that the public or interested parties obtain correct, honest, fair, and easily understandable information. Transparency in financial policy refers to the government's willingness to share information publicly. A clean, efficient, accountable, and responsive city government that prioritizes the hopes and concerns of its citizens can only be achieved through reciprocal transparency between the government and its constituents (Hidayani et al., 2023). Transparency in village fund management is the principle of openness of the village government in presenting information regarding the planning, implementation, and accountability of the use of Village Funds to the public. The parties that use village financial information are the Village Community, Village Apparatus, Regional Government, and Central Government (Sitorus et al., 2024).

According to Roslinda Harahap et al., (2023) Transparency allows the public to monitor the use of Village Funds, thereby increasing public participation and trust. available clearly, timely, and easily understood, which ultimately impacts community welfare. Transparency In the context of the Village, namely openness to encourage community participation in supervision, ensuring that information on the allocation, use, and results of Village Funds is available clearly, timely, easily understood, and used for priority needs, thereby improving welfare. Based on research by Patricia Chandra & Efendi, (2024) and Husna Cut Hadiatul, (2024) adding the Transparency variable as a

moderating variable, transparency has a positive and significant influence on Public satisfaction and in efforts to increase accountability in Village financial management. Transparency indicators include: availability of financial report information to the public, accessibility of data and information, open decision-making processes, distribution of invitations and meeting information (Savitri et al., 2022).

### **Research Method**

This study uses a quantitative research type with an associative causal approach. to test the causal relationship between the independent variable (which influences/causes) and the dependent variable (which is influenced/consequences) how strong its influence is. This study was conducted in Bintuas Village, Natal District, Mandailing Natal Regency. The research period was carried out from October to January 2026.

The data sources used in this study come from Primary Data and the data collection method used in this study is a Questionnaire. The data collection instrument used is by providing questions (Questionnaire) to respondents (samples) which are distributed through Google Forms with a Likert Scale (1-5: Strongly Disagree to Strongly Agree).

The population in this study was the people of Bintuas Village, Natal District, Mandailing Natal Regency. The sampling technique used was Non-Probability Sampling using the Purposive sampling method. According to Sugiyono, (2021) Purposive sampling is a sampling technique with certain criteria. The sample criteria for this study were those aged 20-60 years and a minimum length of residence of 2 years. The population of the Bintuas Village community, Natal District, Mandailing Natal Regency who met the criteria was 1,136 people. The total sample used in this study was 91.90 which was rounded up to 92 respondents using the Slovin formula with an error rate of 10%.

The data analysis used to process this research data includes Instrument Quality Testing using validity test, reliability test, classical assumption test using normality test, Heteroscedasticity Test, and multicollinearity test. Hypothesis testing uses Moderated Regression Analysis (MRA), F test, t test, and coefficient of determination (R<sup>2</sup>) test.

The MRA equation model that will be tested is:

$$Y = a + b_1X + b_2Z + b_3(X \times Z) + e$$

Information :

Y = Community Welfare

$a$  = Constant  
 $b_1$  = Regression coefficient of variable X  
 $b_2$  = Regression coefficient of variable Z  
 $b_3$  = Regression coefficient of X×Z interaction  
 $X$  = Use of Village Funds  
 $Z$  = Transparency  
 $X \times Z$  = Interaction between Village Fund Use and Transparency  
 $e$  = Error

Interpretation: The regression coefficient for the interaction variable ( $b_3$ ) will be the focus:

- If  $b_3$  is positive and significant, then Transparency is proven to strengthen the influence of X on Y.
- If  $b_3$  is negative and significant, then Transparency weakens the influence of X on Y.
- If  $b_3$  is not significant, then Transparency does not function as a moderating variable.

The independent variable in this study is the Use of Village Funds (X). The dependent variable in this study is community welfare (Y). The moderating variable, or the variable that influences (strengthens or weakens) the relationship between the independent and dependent variables, is Transparency (Z).

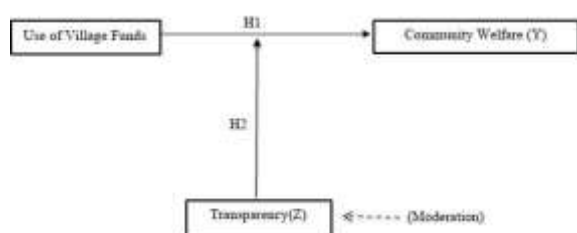


Fig. 1. Conceptual Framework

Source: Author, 2026

### Research Hypothesis

Based on the theoretical basis, previous research, and conceptual framework that has been explained, the research hypothesis is formulated as follows:

- 1) Direct Hypothesis  
 $H_1$ : Use of Village Funds (X) has a positive and significant effect on Community Welfare (Y).
- 2) Moderation Hypothesis  
 $H_2$ : Transparency (Z) moderates the influence of Village Fund Use (X) on Community Welfare (Y).

### Result and Discussion

The demographics of the respondents in this study are described based on several key characteristics of

the sample population of Bintuas Village, Mandailing Natal Regency, including gender, age, education level, and occupation. These characteristics are used to provide a general overview of the background of the respondents involved in the study, thus helping to understand the social conditions of the community and their perceptions of the use of village funds, the transparency of village fund management, and their perceived level of well-being.

### Validity Test Results

Validity testing was conducted to determine the extent to which each statement item in the research instrument was able to accurately measure the variables being studied. The Validity Testing Method Using the Person Product Moment Correlation Technique formula, the instrument was declared valid if the calculated r-value was greater than the r-table, so that the statement item was suitable for use in the research data collection process (Indriyani & Irawati, 2023). The results of the validity test using SPSS 26 can be seen in Table 1.

Table 1  
Validity Test Results

Statement Items	r-count	r-table	Information
<b>Use of Village Funds (X)</b>			
1	0.591	0.205	Valid
2	0.599	0.205	Valid
3	0.535	0.205	Valid
4	0.674	0.205	Valid
5	0.780	0.205	Valid
6	0.770	0.205	Valid
7	0.813	0.205	Valid
8	0.763	0.205	Valid
9	0.802	0.205	Valid
10	0.743	0.205	Valid
<b>Community Welfare (Y)</b>			
1	0.563	0.205	Valid
2	0.695	0.205	Valid
3	0.718	0.205	Valid
4	0.787	0.205	Valid
5	0.683	0.205	Valid
6	0.533	0.205	Valid
7	0.709	0.205	Valid
8	0.761	0.205	Valid
9	0.760	0.205	Valid
10	0.635	0.205	Valid
<b>Transparency (Z)</b>			
1	0.720	0.205	Valid
2	0.766	0.205	Valid
3	0.803	0.205	Valid
4	0.596	0.205	Valid
5	0.726	0.205	Valid
6	0.672	0.205	Valid
7	0.736	0.205	Valid
8	0.691	0.205	Valid

Statement Items	r-count	r-table	Information
9	0.553	0.205	Valid
10	0.575	0.205	Valid

Source: Results of SPSS 26 data processing, 2026

Based on Table 1, it shows that all statement items in the variables of Village Fund Use (X), Community Welfare (Y), and Transparency (Z) have a calculated r-value greater than the r-table of 0.205. Thus, all statement items in these three variables are declared valid and can be used as research instruments because they are able to accurately measure the variables studied.

#### Reliability Test Results

Reliability testing was conducted to determine the level of consistency and stability of the research instrument in measuring the variables studied. An instrument is considered reliable if the Cronbach's Alpha value is greater than the minimum limit of 0.60, making it reliable for use in research (Indriyani & Irawati, 2023). The results of the reliability test using SPSS are shown in Table 2.

No	Variables	Cronbach's Alpha	Test Limits	Information
1	Use of Village Funds (X)	0.892	0.600	Reliable
2	Community Welfare (Y)	0.872	0.600	Reliable
3	Transparency (Z)	0.871	0.600	Reliable

Source: Results of SPSS 26 data processing, 2026

Based on Table 2, it shows that the variables of Village Fund Use (X), Community Welfare (Y), and Transparency (Z) each have Cronbach's Alpha values of 0.892; 0.872; and 0.871, all of which are greater than the test limit of 0.600. Thus, it can be concluded that all variables in this study are declared reliable and suitable for use as research instruments because they have a good level of consistency.

#### Classical Assumption Test

##### Normality Test Results

A normality test was conducted to determine whether the research data was normally distributed, as one of the requirements for regression analysis. Data are considered normally distributed if the

significance value (Asymp. Sig.) is greater than 0.05, allowing the regression model to be used for further testing (Sahir, 2022). The results of the normality test using SPSS are shown in Table 3.

N	92	
Normal Parameters <sup>a,b</sup>	Mean	0.0000000
	Standard Deviation	2.65178824
	Absolute Positive	0.047
	Negative	-0.041
Test Statistics		0.047
Asymp. Sig. (2-tailed)	Sig	0.200 <sup>cd</sup>

Source: Results of SPSS 26 data processing, 2026

Based on Table 3, the Asymp. Sig. (2-tailed) value is 0.200, which is greater than 0.05. Thus, it can be concluded that the residual data in this study is normally distributed, thus fulfilling the assumption of normality and is suitable for further regression analysis.

##### Heteroscedasticity Test Results

The heteroscedasticity test is performed to determine whether the regression model exhibits unequal residual variances from one observation to another. A good regression model is one that does not experience heteroscedasticity, which can be seen through the distribution of points on a scatterplot graph. The points are randomly distributed and do not form a specific pattern (Sahir, 2022). The results of the heteroscedasticity test using SPSS are shown in Figure 2.

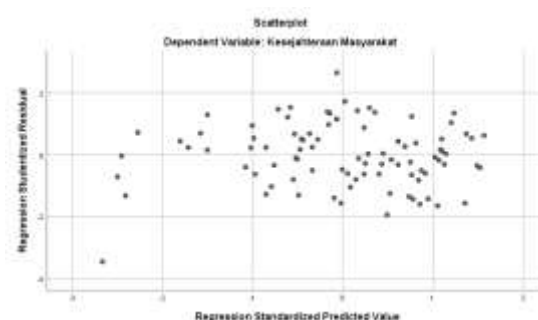


Fig. 2. Results of Heteroscedasticity Test  
Source: Results of SPSS 26 data processing, 2026

Based on Figure 2, it can be seen that the residual points are randomly distributed above and below zero

on the Y-axis and do not form a specific pattern. Therefore, it can be concluded that the regression model in this study does not experience heteroscedasticity and meets the classical assumptions. The Glejser test is conducted to determine whether the regression model exhibits unequal variances from one observation to another. A good regression model is one that does not experience heteroscedasticity.

#### Multicollinearity Test Results

A multicollinearity test was conducted to determine whether there is a strong linear relationship between the independent variables in a regression model. A good regression model should not experience multicollinearity, as this condition can cause the regression coefficients to become unstable and difficult to interpret. Multicollinearity testing in this study used Tolerance and Variance Inflation Factor (VIF) values, with a Tolerance value  $> 0.10$  and a VIF value  $< 10$  indicating the absence of multicollinearity (Sahir, 2022). The results of the multicollinearity test are presented in Table 4.

Table 4  
Multicollinearity Test Results

No	Variables	Tolerance	VIF
1	Use of Village Funds (X)	0.896	1,116
2	Transparency (Z)	0.896	1,116

Source: Results of SPSS 26 data processing, 2026

Based on Table 4, it can be seen that all independent variables, namely the use of village funds and transparency, have a Tolerance value of 0.896 which is greater than 0.10 and a VIF value of 1.116 which is less than 10. These results indicate that there is no strong linear relationship between the independent variables in the regression model. Thus, it can be concluded that the regression model in this study does not experience symptoms of multicollinearity and has met one of the classical assumptions of regression. In research with moderating variables, the analysis was conducted in two models. Model 1 tests the effect of independent variables on the dependent variable without interaction variables and is tested for classical assumptions. Model 2 adds interaction variables ( $X \times Z$ ) to see the role of moderating variables. The comparison of these two models is used to determine

whether the moderating variables actually affect the relationship between variables.

#### Moderated Regression Analysis (MRA)

Moderated Regression Analysis (MRA) is used to test whether a moderator variable can strengthen or weaken the influence of an independent variable on a dependent variable. In this study, transparency is positioned as a moderating variable suspected of moderating the relationship between village fund use and community welfare. Moderation effect testing is conducted by including interaction terms between the independent and moderator variables in the regression model (Sahir, 2022). The results of the MRA test are presented in Table 5.

Table 5  
Moderated Regression Analysis (MRA)

Constant		
Unstandardized Coefficients	B	5,859
	Std. Error	2,366
Standardized Coefficients	Beta	
t		2,476
Sig.		0.015
Use of Village Funds (X1)		
Unstandardized Coefficients	B	1,300
	Std. Error	0.110
Standardized Coefficients	Beta	1,288
t		11,840
Sig.		0,000
Transparency (X2)		
Unstandardized Coefficients	B	0.171
	Std. Error	0.059
Standardized Coefficients	Beta	0.298
t		2,895
Sig.		0.005
Use of Village Funds *Transparency (Z)		
Unstandardized Coefficients	B	-0.008
	Std. Error	0.003
Standardized Coefficients	Beta	-0.444
t		2,807
Sig.		0.006

Source: Results of SPSS 26 data processing, 2026

Based on the results in Table 5, the following regression equation can be made:

$$Y = 5.859 + 1.300X + 0.171Z - 0.008(X \times Z) + e$$

Based on this equation, the results can be explained as follows:

The constant value of 5.859 indicates that if the use of village funds (X), transparency (Z), and the interaction between the use of village funds and transparency ( $X \times Z$ ) are zero, then the level of community welfare is predicted to be 5.859. This constant value is theoretical and not interpreted

practically, but serves as a starting point in the formation of a regression model.

The regression coefficient of Village Fund Use (X) of 1.300 indicates that every one unit increase in village fund use will increase community welfare by 1.300 units, assuming other variables are constant. This result indicates that the use of village funds has a positive effect on community welfare, where the more optimal the use of village funds, the more community welfare will increase.

The Transparency (Z) regression coefficient of 0.171 indicates that every one-unit increase in transparency will increase community welfare by 0.171 units, assuming other variables remain constant. This indicates that transparency in village fund management plays a significant role in driving improvements in community welfare.

The regression coefficient of the interaction between village fund use and transparency ( $X \times Z$ ) of -0.008 indicates that transparency moderates the relationship between village fund use and community welfare in a negative direction. This means that the higher the level of transparency, the weaker the effect of village fund use on community welfare. This condition indicates that community welfare is determined not only by the amount of village fund use, but also by the management, monitoring, and distribution mechanisms of these funds.

### Hypothesis Testing

#### Partial Test Results (t-Test)

The t-test is used to determine the partial effect of each independent variable and moderating variable on the dependent variable in a regression model. This test is performed by comparing the t-statistic value with the t-table value and observing the significance value (Sig.). A variable is declared to have a significant effect if the t-statistic value is greater than the t-table value and the Sig. value is less than the 0.05 significance level (Sahir, 2022). Referring to Table 5, the t-test results can be explained as follows:

#### The Impact of Village Fund Use on Community Welfare (H1)

The village fund utilization variable has a t-statistic of 11.840, significantly greater than the t-table of 1.661, with a significance value of 0.000 ( $<0.05$ ). This indicates that the use of village funds has a

positive and significant impact on community welfare. Thus, Hypothesis H<sub>1</sub> is accepted.

#### The Impact of Transparency on Community Welfare

The transparency variable has a t-statistic of 2.895, greater than the t-table of 1.661, with a significance value of 0.005 ( $<0.05$ ). This indicates that transparency has a positive and significant effect on public welfare. This means that transparency is a crucial factor in directly improving public welfare.

#### Interaction between Village Fund Use and Transparency as a Moderating Variable (H2)

The interaction variable between village fund use and transparency has a t statistic of -2.807, with a significance value of 0.006 ( $<0.05$ ). Statistically, the absolute value of the calculated t is greater than the t table ( $-2.807 > 1.986$ ), so the moderation is significant. Based on significance, transparency is a quasi-moderator variable, because in addition to moderating, this variable also has a significant direct influence on community welfare. Thus, Hypothesis H<sub>2</sub> is accepted as a significant moderation with a negative direction.

#### Simultaneous Test Results (F Test)

The simultaneous test (F test) is used to determine whether all independent variables included in the regression model simultaneously have a significant effect on the dependent variable. This test is performed by comparing the calculated F value with the F table and observing the significance value (Sig.). The regression model is declared feasible if the calculated F value is greater than the F table and the Sig. value is less than 0.05 (Sahir, 2022). The results of the simultaneous test (F test) in this study are presented in Table 6.

Table 6  
F Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	908,966	3	302,989		
1 Residual	20,719	88	0.235	1286,895	0.000 <sup>b</sup>
Total	929,685	91			

Source: Results of SPSS 26 data processing, 2026

Based on Table 6, the calculated F-value is 1286.895  $>$  F-table of 2.708 with a significance value of 0.000 ( $<0.05$ ). These results indicate that the use

of village funds, transparency, and the interaction between the use of village funds and transparency simultaneously have a significant effect on community welfare. Thus, it can be concluded that the regression model used in this study is feasible and able to explain the influence of the independent variables on the dependent variable together.

#### *Coefficient of Determination*

The coefficient of determination ( $R^2$ ) is used to measure the extent to which an independent variable explains variation in the dependent variable in a regression model. The  $R^2$  value ranges from 0 to 1, with the closer it is to 1, the stronger the model's ability to explain the dependent variable (Sahir, 2022). Furthermore, the Adjusted  $R^2$  value is used to provide more accurate results because it adjusts for the number of independent variables in the model. The results of the coefficient of determination test in this study are presented in Table 7.

Table 7  
Coefficient of Determination

Model	R	R Square	Adjusted R Square	Standard Error of The Estimate
1	0.989 <sup>a</sup>	0.978	0.977	0.485

Source: Results of SPSS 26 data processing, 2026

Based on Table 7, the R Square value is 0.989, indicating that 98.9% of the variation in community welfare can be explained by the use of village funds, transparency, and the interaction between village fund use and transparency. Meanwhile, the remaining 1.1% is influenced by other variables outside the research model. The Adjusted R Square value of 0.978 or 97.8% strengthens these results, indicating that the regression model has excellent explanatory power and is suitable for further analysis. The results of the coefficient of determination ( $R^2$ ) in research that only uses one independent variable and one moderating variable do require careful interpretation. The  $R^2$  value indicates the extent to which the independent variable is able to explain the variation in the dependent variable in the regression model. If the  $R^2$  value appears very high, it does not necessarily mean the model is completely perfect, because in reality, community welfare is usually influenced by many other factors, such as education level, employment opportunities, village economic conditions, and community participation. Therefore, the  $R^2$  results in this study need to be understood that

the use of village funds and transparency only explain part of the variation in community welfare, while other factors outside the research model also have the potential to influence these variables.

#### **Discussion**

##### *The Impact of Village Fund Use on Community Welfare*

Based on the analysis and hypothesis testing, it is clear that the use of village funds has a significant impact on community welfare in Bintuas Village, Mandailing Natal Regency. This indicates that the use of Village Funds for physical development, community empowerment, and other programs effectively contributes to increased income, access to public facilities, and the quality of life of the village community. The more targeted and optimal the use of these funds, the more significant the impact on improving welfare will be.

This shows that hypothesis 1 provides empirical evidence in Agency Theory that the agency relationship in the management of Village Funds at the research location is successful. The funds are not lost or misused massively, but instead are turned into welfare improvements, which is the main goal of the Principal. And Hypothesis 1 is a validation of the principle of effectiveness in Good Governance Theory, This proves that the management of the Bintuas Village Fund is not only fulfilling procedures (processes), but also truly performing (having an impact) according to its mandate to improve the welfare of the community. Both theories provide different but complementary foundations for understanding why Hypothesis 1 is important. Agency Theory answers that the village government (Agent) can be trusted. Good Governance Theory answers that the Village Fund management system is running well and successfully. The results of Hypothesis 1 are accepted and support the claims of both theories in the context of this research.

The results of this study are in line with research conducted by Rukmana & Utami, (2023) and Jefi B. Apena, Ita Pingkan F. Rorong, Krest D. Tolosang, (2023). Both studies have research results that the use of Village Funds has a positive effect on community welfare.

### *Transparency Moderates The Influence of Village Fund Use on Community Welfare*

Based on the results of the Moderated Regression Analysis (MRA), this hypothesis is accepted. The coefficient of the interaction variable ( $X \times Z$ ) is  $-0.008$  with a significance value of  $0.006 (<0.05)$  and an absolute t-statistic of  $-2.807 > t\text{-table } 1.986$ , proving that transparency statistically significantly moderates the relationship. What is interesting and the focus of the discussion is the negative direction of moderation, as indicated by the negative sign of the interaction coefficient. This indicates that the higher the level of transparency, the positive influence of village fund use on community welfare tends to weaken.

This negative moderation finding does not necessarily mean that transparency is inherently bad. It must be understood within a more complex context. First, the main regression equation shows that both village fund use ( $X$ ) and transparency ( $Z$ ) have a positive and significant direct effect on well-being. This means that individually, both variables contribute to improving community well-being. Second, the negative moderating effect of their interaction reveals an interesting dynamic: transparency functions as a quasi-moderator variable that, in addition to its direct effect, also changes the strength (but not the direction) of the relationship between  $X$  and  $Y$ .

One logical interpretation is that under conditions of high transparency, the village fund utilization mechanism may have reached an optimal point where the marginal benefit from increased fund utilization ( $X$ ) becomes smaller. High transparency creates a system of checks and balances, accountability, and strict procedures. While this is excellent for preventing irregularities, in practice it can increase bureaucratic complexity (complicated and slow government procedures) and program implementation time. In other words, high transparency shifts the focus from simply the amount of funds used to the quality and compliance of the process. Community welfare in this context is no longer solely determined by the amount of funds disbursed, but is strongly influenced by good governance mechanisms guaranteed by transparency. Conversely, in situations of low transparency, the relationship between fund utilization and welfare may appear stronger because the absence of adequate

oversight mechanisms allows for faster and more flexible fund disbursement (despite the risk of irregularities), making the effects on specific welfare indicators appear more direct.

Good Governance Theory encouraging transparency as a core principle. The negative moderation finding reveals an important nuance: high transparency fosters good governance but can also lead to bureaucracy and stringent procedures. As a result, while preventing irregularities, the agility and marginal impact of each additional funding increase can be reduced. Welfare is then determined not only by the amount of funding but also by the quality of processes, which transparency ensures.

Agency Theory explains the relationship between the mandating party (the community) and the implementer (the village government). Transparency serves as a tool to reduce information asymmetry. The negative moderation effect can be seen as a reflection of agency costs. High transparency requires large monitoring, auditing, and reporting costs. Negative interactions indicate that to some extent, the benefits of increased funding are somewhat dampened by the oversight costs required to ensure accountability. In other words, transparency ensures that funds are used properly, but this assurance process itself requires resources. Previous studies also found that good governance, accountability, and one of them including transparency, do not always strengthen the relationship linearly as in the research of Patricia Chandra & Efendi, (2024) and Ayu Aldira Sari, (2024). The negative moderation findings in this study reflect a similar phenomenon, where high transparency if not accompanied by adequate community capacity and participation, may only be a formal procedure that slightly reduces the speed and direct impact of fund distribution.

### **Conclusion**

The research findings indicate that the use of Village Funds at the research site has had a positive and significant impact on community welfare. These findings demonstrate that village fund management has been effective in supporting increased income, access to facilities, and the community's quality of life. Theoretically, these results support Agency Theory by demonstrating that the village government (agent) has effectively carried out the mandate of the community (principal), confirming the principle of effectiveness in Good Governance Theory.

The role of transparency in village fund management has been statistically proven to moderate the relationship between fund use and community welfare. However, the moderation trend is negative, indicating that at high levels of transparency, the positive effect of village fund use on welfare tends to weaken. This finding reveals a complex dynamic in which transparency, in addition to its direct positive effect, also functions as a quasi-moderator (pseudo-variable). The interpretation is that high transparency creates accountable governance but can also bring bureaucratic complexity (layered, complicated, and slow rules and procedures) and agency costs (monitoring and procedural costs), thus slightly dampening the agility and marginal impact of additional fund allocations. Welfare under these conditions no longer depends solely on the amount of funds but is increasingly influenced by the quality of the governance process. Consequently, high transparency can introduce too much interference into policymaking.

Village governments need to balance transparency with efficiency in program implementation, so that accountability procedures do not hinder the speed and impact of programs. Communities and supervisors should focus on the quality of the process and actual participation, not just the amount of funds disbursed.

The researcher's suggestion for future researchers is to examine other variables such as community participation or institutional capacity as mediators or moderators to explain the mechanism more clearly. Furthermore, this negative moderation finding should be explored more deeply using qualitative methods to understand the causes of the weakening influence from the perspectives of officials and the community. The contribution of this study is to provide an empirical understanding of the influence of village fund use on community welfare and to demonstrate that the level of transparency in village fund management can strengthen or weaken this relationship. By including transparency as a moderating variable, this study not only examines the direct influence of village fund use but also explains the role of transparent village governance in increasing the effectiveness of village fund utilization on community welfare, particularly in Bintuas Village, Mandailing Natal Regency.

## References

- Amin, A., & Wulandari. (2025). Transparency in Village Fund Management: Policy Evaluation and Implementation. *Proceedings of the Indonesian National Seminar* 3(2), 208–218.
- Andreani, Y., & Syafina, L. (2022). Accountability and Transparency of Information Technology-Based Financial Reports at the National Zakat Collection Agency of Deli Serdang Regency. *AKUA: Journal of Accounting and Finance*, 1(2), 203–209. <https://doi.org/10.54259/Akua.V1i2.771>
- Apena, JB, Rorong, IPF, & Tolosang, KD (2023). The Impact of Village Funds and Village Fund Allocation on the Level of Community Welfare in Kiama Village, Melonguane District, Talaud Regency (Study: Kiama Village, Melonguane District, Talaud Regency). *Scientific Periodical Journal of Efficiency*. 23(4), 85–96.
- Asrul. (2023). The Influence of Village Fund Management and Transparency of Village Funds on Community Welfare (Study in Nagari Sikucua Barat, V Koto Kampung Dalam District), Padang Pariaman Regency. *Journal of Socio-Cultural Research and Scientific Studies*, 05, 1–13.
- Az-Zahra, SF, Nurbaiti., & Syafina, L. (2023). Implementation of Government Accounting Standards and Village Financial Accountability. *JRKA* 9(1), 146–167.
- Chandra, LP, & Efendi, D. (2024). The Influence of Accountability, Work Effectiveness, and Service Quality on Public Quality Moderated by Transparency. *Journal of Accounting Science and Research*, Vol. 13 No. 4.
- Dawali, N., Canon, S., & Akib, FHY (2025). Vol. 7, No. 2, September 2025 The Influence of Village Funds on Community Empowerment and Improving Community Welfare in Paris Village, Mootilango District, Gorontalo Regency. *Elasticity: Journal of Development Economics* Vol. 7(2).
- Dika, Y. (2022). Influence Of Fund Allocation Management Accountability Village The Role Of Village Administration And Participation Village Level To Community Welfare. *Proceedings Of International Conference On Economics, Business Management, Accounting And Sustainability*, 6, 1–5. <https://doi.org/10.55980/Icebas.Vi.31>
- Directorate General of Fiscal Balance. (2024). 10 Years of Village Fund Development. Ministry of Finance of the Republic of Indonesia. [djpk.kemenkeu.go.id](http://djpk.kemenkeu.go.id)
- Hidayani, S., Kamilah, K., & Tambunan, K. (2023). Transparency and Accountability in the Implementation of the Village Financial System (Siskeudes) in Banyumas Village, Stabat District, Langkat Regency. *Scientific Journal of Accounting Economics Students*, 8(3), 406–417. <https://doi.org/10.24815/Jimeka.V8i3.26538>
- Husna, H., C. (2024). The Influence of Village Government Competence, Community Participation, and Utilization of Information Technology on Village Fund Management Accountability with Transparency as a Moderating Variable [Thesis]. Sultan Agung Islamic University, Semarang.
- Indriyani, SN, & Irawati, I. (2023). Service quality and customer reference on consumer purchase interest. *Krisnadwipayana International Journal of Management Studies*, 3(2), 233–247.
- Lestari, DNL, & Darma, IGM, (2025). Systematic Literature Review (SLR): Transparency and Accountability in Village Financial Management. *IJEAM: International Journal of Economics, Accounting, and Management* 1(5), 309–314.
- Khasanah, AN, & Marisan, I. (2022). The Influence of Village Fund Allocation (ADD) Use, Accountability, and Transparency in

- Village Financial Management on Community Welfare (A Study in Jambu Village, Mlonggo District, Jepara Regency). *Journal of Accounting Recognition*, 6(1), 32–48. <https://doi.org/10.34001/Jra.V6i1.189>
- Mardalena, M., Adji, A., Rohima, S., Harunurraiyid, H., & Nida, R. (2023). The Welfare Impact of Village Fund Allocation in Indonesia: The Comparative of Java and Non-Java. *Optimum: Journal of Economics and Development*, 13(2), 207–218. <https://doi.org/10.12928/Optimum.V13i2.8668>
- Oktriawan, W., Adriansyah., & Alisa, S. (2022). Community Welfare in Campakasari Village, Campaka District, Purwakarta Regency. *Muttaqien*, 3 (1), 1–14.
- Panda, C., Sayang, S., & Ismail, N. (2021). Management of Village Fund Allocation (ADD) in Supporting Rural Development (Case Study of Nanganesa Village and Manulondo Village, Ndona District, Ende Regency). *Journal of Accounting Science Research (JRIA)*, Vol. 1 No. 2.
- Panjaitan, DK, Rokan, MK, & Syafina, L. (2023). Analysis of Village Financial Management Based on Home Affairs Ministerial Regulation No. 20 of 2018 in an Effort to Optimize Village Funds (Case Study in Pantis Village, Pahae Julu District, North Tapanuli Regency). *Economics, Business, Management, and Accounting*, 4(1), 1200–1209.
- Pasaribu, SN, Nasution, YSJ, & Harmain, H. (2023). Village Financial Management and Village Financial Accounting System to Improve the Performance of the Sibito Village Government. *Scientific Journal of Management, Economics, & Accounting (MEA)*, 7(3), 95–111. <https://doi.org/10.31955/Mea.V7i3.3307>
- Pembangunan, I., Ipm, M., & Mandailing, K. (2025). Human Development Index (HDI) of Mandailing Natal Regency in 2025. 2024(03), 1–8.
- Prof. Dr. Sugiyono. (2019). Quantitative, Qualitative and R&D Research Methods. In *Angewandte Chemie International Edition*, 6(11), 951–952. (IssueSeptembfile:///C:/Users/Asus/Downloads/29641SM.Pdffile:///C:/Users/Asus/Downloads/29-64-1-SM.Pdfer 2016).
- Priyatama, T., Purnomo, SD, Zumaeroh., Sundari, S., Danuta, KS, (2025). The Influence of Accountability, Transparency, Village Policy and Village Fund Allocation on Community Welfare in Rempoah Village, Baturraden District, Banyumas Regency. *Journal of Taxation and Business* 6(1).
- Roslinda Harahap, Fauzi Arif Lubis, & Rahmat Daim Harahap. (2023). Implementation of the Village Financial Accounting System (SISKEUDES) in Transparency and Accountability of Village Fund Management. *GEMILANG: Journal of Management and Accounting*, 3(4), 199–207. <https://doi.org/10.56910/Gemilang.V3i4.876>
- Rukmana, H., & Utami, WB (2023). The Influence of Village Fund Use, Accountability, and Transparency of Village Financial Management on the Welfare of the Majasto Village Community, Tawangsari District. *Scientific Journal of Business Accounting Finance* 2(2), 307–316.
- Sahir, SH (2022). *Research Methodology*. Karya Bakti Makmur Indonesia.
- Sari, AA, Sayfina, L., & Daulay, AN (2024). The effect of the use of village fund allocations on community welfare with accountability as a moderating variable. *Sustainability: Journal of Management and Accounting Journal*, 9(1), 72–82.
- Sastrawan, B., Samsi, A., & Seran, GG (2024). Government Services in the Field of Public Welfare. *Karimah Tauhid* 3 (1).
- Savitri, E., Andreas., Diyanto, V., & Gumanti, TA (2022). Accountability Of Villages In Riau Province. *Journal of Contemporary Accounting Research* 14(2), 131–138.
- Sitorus, SR, Sudiarti, S., Lathief, M., & Nasution, I. (2024). Analysis of Village Financial Management Planning Based on an Islamic Economic Perspective (Case Study in Gunung Berkas Village, Bandar Pulau District, Asahan). *Journal of Applied Management and Finance* 13(02), 601–611.
- Sugiyono. (2021). *Quantitative, qualitative, and R&D research methods*. Alfabeta.
- Sukmarani, W., Dwiastuti. MMP, Kholisah, L. (2025). The Influence of Village Fund Management on the Welfare of Village Communities in Bantul Regency. *Solusi: Journal of Economic and Business Studies* 20(1), 16–28.
- Sulamsi, & Susanti, A., (2025). Effective Strategy for Village Fund Management in Realizing Community Welfare in Adirejo Village, Tunjungan District, Blora Regency. *PUBLIKA: Journal of Administrative Science* 11(1), 93–104. <https://doi.org/10.25299/Jiap.2025.21707>
- Suryani, A. (2022). The Accountability of Village Funds and Improving the Effectiveness of Village Programs. *Journal of Regional Financing and Development Perspectives*, 10(2), 119–130. <https://doi.org/10.22437/Ppd.V10i2.15630>
- Syahputri, DA, Nasution, YSJ, & Nurwani. (2023). The Influence of Accountability and Transparency on Village Fund Management in Percut Sei Tuan District, Deli Serdang Regency. *KITABAH: Journal of Accounting and Finance*, 7(1), 17–34.
- Tuaty, OD (2023). The Influence of Accountability of Village Fund Allocation Financial Management, Village Policies and Village Institutions on the Welfare of the Kaera Village Community, East Pantar District, Alor Regency. *Wahana Pendidikan Scientific Journal*, 9(19), 605–620.
- Wildani, WN, Alfadhillah, FH, & Windari, NN (2022). Efficient Use Of Village Funds And Transfers To Regions In Increasing Community Welfare. *Economic Dynamics*, 13(2), 247–258. <https://doi.org/10.29313/De.V13i2.9629>
- Yonara, R., Mulyani, HTS, & Tigor, RH (2022). The Influence of Accountability in Village Fund Allocation Management, Transparency in Village Fund Use, and Village Fund Policy on Community Welfare (Case Study in Beluluk Village, Pangkalan Baru District, Central Bangka Regency). *Electronic Business Scientific Journal (Jinbe)*, Stie-Ibek 2(1), 16–24.
- Zannah, I., Samri, Y., Nasution, J., & Lubis, AW (2024). Accountability of Village Fund Efficiency in Silumajang Village Infrastructure Development in 2022. *Journal of Economic, Management, Accounting and Technology* 7(1).