

## AN ANALYSIS OF THE EFFECTS OF BUDGET MANAGEMENT QUALITY, HUMAN CAPITAL, AND CROSS-SECTOR COLLABORATION ON STUNTING FINANCING WITH GOOD GOVERNANCE AS A MEDIATING VARIABLE AT COMMUNITY HEALTH CENTERS IN TIMOR TENGAH SELATAN REGENCY

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### Abstract

This study aims to analyze the effect of budget management quality and human capital on stunting financing, with good governance as a mediating variable at public health centers in Timor Tengah Selatan Regency. The research adopts a quantitative explanatory approach using Structural Equation Modeling–Partial Least Squares (SEM-PLS), involving 143 respondents from 37 public health centers. The results indicate that human capital and good governance have a positive and significant effect on stunting financing, while budget management quality does not have a direct significant effect. However, budget management quality significantly influences good governance. Furthermore, the mediation analysis reveals that good governance significantly mediates the relationship between budget management quality and stunting financing, but does not mediate the relationship between human capital and stunting financing. These findings highlight that the effectiveness of stunting financing is not solely determined by budget management quality, but is more strongly influenced by human resource capacity and the implementation of good governance principles. This study contributes to the literature on public financial management and health policy, particularly in strengthening governance and human capital at the local health service level.

**Keywords:** *Budget Management Quality, Human Capital, Good Governance, Stunting Financing, SEM-PLS.*

### INTRODUCTION

The development of high-quality human resources is a fundamental prerequisite for achieving the vision of Indonesia Gold 2045. One of the major challenges currently faced is the high prevalence of stunting, which has long-term impacts on the quality of future generations. Stunting is not only associated with impaired physical growth but also contributes to reduced cognitive capacity and economic productivity in the long term. Therefore, stunting should not be viewed solely as a health issue, but rather as a multidimensional development problem that requires integrated and sustainable policy interventions. Studies by World Health Organization emphasize that stunting has significant long-term consequences for human capital development and national economic growth.

The trend of stunting prevalence in East Nusa Tenggara Province shows a fluctuating pattern. Although there has been a decline in recent years, the subsequent increase indicates that intervention efforts have not been fully consistent and sustainable. This condition reflects various structural challenges, such as limited access to food, environmental constraints, and suboptimal integration of cross-sectoral policies at the regional level. Research by World Bank highlights that effective stunting reduction requires a multisectoral approach involving nutrition, sanitation, education, and social protection interventions. A similar phenomenon is observed in Timor Tengah Selatan Regency, which continues to face significant challenges in reducing stunting rates. Despite previous improvements, the recent increase suggests that program effectiveness remains suboptimal. Beyond technical issues, these challenges are closely related to governance aspects, particularly in policy implementation and program financing at the local level. This finding is consistent with studies by OECD, which underline that governance quality plays a crucial role in determining the success of public policy implementation.

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Furthermore, budget analysis reveals a discrepancy between increased budget allocations and program realization. Despite significant increases in funding, budget absorption rates have declined. This indicates a gap between fiscal planning and implementation capacity in practice. Low realization rates across several government units suggest issues related to planning quality, limited human resource capacity, and weak inter-sectoral coordination. According to Allen et al., the effectiveness of public spending is not solely determined by the size of the budget but also by the quality of implementation and financial management systems. From a public financial management perspective, these findings indicate that increased budget allocations do not automatically translate into improved program performance. The effectiveness of financing is strongly influenced by the quality of budget management and governance practices. Effective budget management should not only focus on administrative compliance but must also promote optimal outcomes through principles of transparency, accountability, efficiency, and effectiveness. This aligns with the concept proposed by Mardiasmo, (2018) which emphasizes the importance of performance-based budgeting in the public sector.

In addition, human capital is a critical factor in determining the success of program implementation. Human resources with adequate competencies, knowledge, and skills are essential for improving planning, implementation, and evaluation processes. In this context, human capital should be viewed not merely as a resource but as a strategic asset that adds value to organizational performance. The theory of Fleischhauer (2007) highlights that investment in human capital is key to enhancing productivity and organizational effectiveness. On the other hand, the application of good governance principles plays a crucial role in ensuring the effectiveness of public program financing. Good governance functions as a control mechanism that ensures transparency, accountability, and result-oriented financial management. Research Kaufmann et al. (2010) demonstrates that governance quality is strongly associated with the effectiveness of public policies and development outcomes.

Despite the growing body of literature on public financial management, human capital, and governance, most previous studies have examined these factors separately. Such an approach is insufficient to explain the integrated causal relationships among these variables, particularly at the primary healthcare level. Moreover, prior research tends to treat budget management as a direct determinant of program performance without considering governance as a mediating mechanism. Similarly, studies on human capital often position it as a direct factor, without exploring its interaction with governance systems in influencing program outcomes. Therefore, a significant research gap exists in the limited number of studies that integrate budget management quality, human capital, and good governance within a single structural model, particularly in the context of stunting financing at the local level. Furthermore, empirical investigations on the mediating role of good governance in linking public financial management to health program effectiveness remain scarce.

Accordingly, the novelty of this study lies in the development of an integrated conceptual model that combines budget management quality and human capital with good governance as a mediating variable in explaining stunting financing. This study not only examines direct relationships but also uncovers indirect mechanisms using Structural Equation Modeling based on Partial Least Squares (SEM-PLS) at the level of public health centers. Additionally, this research provides empirical contributions in a local context, namely Timor Tengah Selatan Regency, which has received limited attention in existing literature. Thus, this study aims to analyze the influence of budget management quality and human capital on stunting financing, with good governance as a mediating variable, and to contribute to the advancement of public financial management and governance studies in improving the effectiveness of stunting reduction programs at the local level.

## METHOD

Building upon the conceptual framework presented in the introduction, this study posits that budget management quality and human capital are key determinants of good governance, which subsequently influence the effectiveness of stunting financing. High-quality budget management is expected to enhance transparency, accountability, and efficiency in program implementation, while strong human resource capacity contributes to better planning, execution, and evaluation of public programs. In this context, good governance functions as a critical mechanism that ensures public programs are implemented effectively and achieve their intended outcomes.

Based on this framework, the study formulates hypotheses to examine both direct and indirect relationships among variables. Specifically, the study tests the effects of budget management quality and human capital on stunting financing, their influence on good governance, and the mediating role of good governance in linking these variables. This research adopts a quantitative explanatory approach, aiming to investigate causal relationships among variables through statistical analysis. The explanatory design is appropriate as it allows for empirical testing of the proposed relationships within the conceptual model. The study focuses on examining how budget

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management quality and human capital influence stunting financing, with good governance acting as a mediating variable at public health in Timor Tengah Selatan Regency. The research design employs a causal structural model, which enables the analysis of both direct and indirect relationships among variables within an integrated system. This approach goes beyond descriptive analysis by empirically testing the interactions among key factors in the context of public sector governance and health financing. To analyze the complex relationships among exogenous, mediating, and endogenous variables, this study utilizes Structural Equation Modeling (SEM) based on Partial Least Squares (PLS). The SEM-PLS method is selected due to its ability to simultaneously estimate multiple relationships, including mediation effects. Additionally, SEM-PLS is suitable for studies with relatively small sample sizes and non-normal data distributions, which are common in public sector research (Hair et al., 2019)

The population of this study consists of all officials and personnel directly involved in managing stunting financing and program implementation at Health Center in Timor Tengah Selatan Regency. This includes both managerial and technical staff who play strategic roles in planning, executing, and reporting program activities. The unit of analysis comprises 37 public health centers, with each center represented by four respondents: the Head of the Health Center, the Head of Administration, the nutrition program manager, and the treasurer of the Health Operational Fee (BOK). Therefore, the total number of respondents in this study is 148 individuals. This sample size is considered adequate for SEM-PLS analysis, which does not require large samples as long as minimum structural model requirements are met.

## RESULTS AND DISCUSSION

The structural model illustrates the relationships between Budget Management Quality (KPA) and Human Capital (HC) on Stunting Financing (PS), with Good Governance (GG) acting as a mediating variable. The estimation results indicate that KPA and HC have significant effects on GG, with coefficients of 0.473 and 0.309, respectively. Furthermore, GG influences PS with a coefficient of 0.358, highlighting the critical role of governance in improving the effectiveness of stunting financing. In addition, the model also demonstrates the presence of direct effects of KPA and HC on PS, although with varying levels of influence. The coefficient of determination ( $R^2$ ) shows that GG is explained by KPA and HC by 0.554, while PS is explained by all variables in the model by 0.751, indicating that the model has strong explanatory power. Overall, the model confirms that good governance serves as a key mechanism linking budget management quality and human capital to the effectiveness of stunting financing.

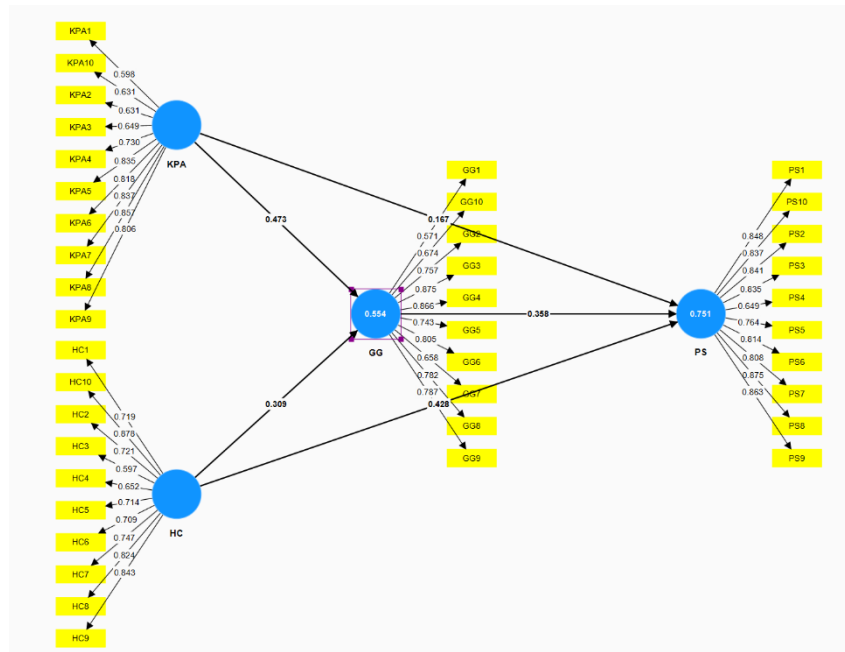


Figure 1. Model SEM PLS

The convergent validity of the model is assessed based on the loading factor values and the Average Variance Extracted (AVE). The results of the convergent validity test are presented in Table 5. The table shows that

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all loading factor values exceed 0.70 (Hair et al., 2019), indicating that all measurement indicators meet the criteria for convergent validity and are valid in measuring their respective constructs. Furthermore, Table 1 shows that the AVE values for all constructs are above 0.50, which implies that each construct is capable of adequately explaining the variance of its corresponding latent variables.

**Tabel 1. Convergent Validity**

Variable	Indicator	Outer Loading		AVE	
		Value	Explanation	Value	Explanation
<b>Quality of Budget Management</b>	KPA1	0,598	Valid	0,576	Valid
	KPA2	0,631	Valid		
	KPA3	0,649	Valid		
	KPA4	0,730	Valid		
	KPA5	0,835	Valid		
	KPA6	0,818	Valid		
	KPA7	0,837	Valid		
	KPA8	0,857	Valid		
	KPA9	0,806	Valid		
	KPA10	0,631	Valid		
<b>Human Capital</b>	HC1	0,719	Valid	0,555	Valid
	HC2	0,721	Valid		
	HC3	0,597	Valid		
	HC4	0,652	Valid		
	HC5	0,714	Valid		
	HC6	0,709	Valid		
	HC7	0,747	Valid		
	HC8	0,824	Valid		
	HC9	0,843	Valid		
	HC10	0,878	Valid		
<b>Stunting Financing</b>	PS1	0,848	Valid	0,665	Valid
	PS2	0,841	Valid		
	PS3	0,835	Valid		
	PS4	0,649	Valid		
	PS5	0,764	Valid		
	PS6	0,814	Valid		
	PS7	0,808	Valid		
	PS8	0,875	Valid		
	PS9	0,863	Valid		
	PS10	0,837	Valid		
<b>Good Governance</b>	GG1	0,571	Valid	0,574	Valid
	GG2	0,757	Valid		
	GG3	0,875	Valid		
	GG4	0,866	Valid		
	GG5	0,743	Valid		
	GG6	0,805	Valid		

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Variable	Indicator	Outer Loading		AVE	
		Value	Explanation	Value	Explanation
	GG7	0,658	Valid		
	GG8	0,782	Valid		
	GG9	0,787	Valid		
	GG10	0,674	Valid		

The convergent validity of the measurement model was assessed using outer loading values and the Average Variance Extracted (AVE). As presented in Table 1, all indicators demonstrate loading factor values above the acceptable threshold of 0.50, with most indicators exceeding 0.70, indicating satisfactory indicator reliability (Hair et al., 2019). This suggests that all measurement items are valid and adequately represent their respective latent constructs. Specifically, the loading values for Quality of Budget Management range from 0.598 to 0.857, Human Capital from 0.597 to 0.878, Stunting Financing from 0.649 to 0.875, and Good Governance from 0.571 to 0.875. These results confirm that each indicator has a strong correlation with its corresponding construct. Furthermore, the AVE values for all constructs exceed the minimum requirement of 0.50, with values of 0.576 for Quality of Budget Management, 0.555 for Human Capital, 0.665 for Stunting Financing, and 0.574 for Good Governance. This indicates that each construct explains more than 50% of the variance of its indicators. Overall, these findings confirm that the measurement model satisfies the criteria for convergent validity, and all constructs are considered valid for further analysis.

**Tabel 2. Heterotrait Monotrait Ratio (HTMT)**

Indicator	GG	HC	KPA	PS	Exp
<b>GG</b>					
<b>HC</b>	0,720				Valid
<b>KPA</b>	0,770	0.864			Valid
<b>PS</b>	0,817	0.849	0,822		Valid

**Tabel 3 Cross Loadings**

Cross Loadings	GG	HC	KPA	PS	Exp
GG1	<b>0,571</b>	0,226	0,256	0,291	Valid
GG2	<b>0,757</b>	0,448	0,486	0,540	Valid
GG3	<b>0,875</b>	0,583	0,602	0,697	Valid
GG4	<b>0,866</b>	0,577	0,575	0,631	Valid
GG5	<b>0,743</b>	0,590	0,631	0,607	Valid
GG6	<b>0,805</b>	0,564	0,575	0,653	Valid
GG7	<b>0,658</b>	0,475	0,540	0,501	Valid
GG8	<b>0,782</b>	0,556	0,548	0,644	Valid
GG9	<b>0,787</b>	0,568	0,593	0,598	Valid
GG10	<b>0,674</b>	0,490	0,534	0,560	Valid
HC1	0,423	<b>0,719</b>	0,563	0,491	Valid
HC2	0,438	<b>0,721</b>	0,630	0,502	Valid
HC3	0,337	<b>0,597</b>	0,418	0,381	Valid
HC4	0,336	<b>0,652</b>	0,435	0,526	Valid
HC5	0,460	<b>0,714</b>	0,513	0,572	Valid
HC6	0,547	<b>0,709</b>	0,565	0,511	Valid
HC7	0,546	<b>0,747</b>	0,657	0,620	Valid
HC8	0,682	<b>0,824</b>	0,683	0,737	Valid
HC9	0,583	<b>0,843</b>	0,659	0,770	Valid
HC10	0,631	<b>0,878</b>	0,755	0,754	Valid
KPA1	0,369	0,412	<b>0,598</b>	0,450	Valid
KPA2	0,507	0,487	<b>0,631</b>	0,490	Valid
KPA3	0,519	0,529	<b>0,649</b>	0,507	Valid
KPA4	0,589	0,651	<b>0,730</b>	0,621	Valid
KPA5	0,576	0,649	<b>0,835</b>	0,616	Valid

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KPA6	0,541	0,593	<b>0,818</b>	0,562	Valid
KPA7	0,621	0,707	<b>0,837</b>	0,658	Valid
KPA8	0,610	0,656	<b>0,857</b>	0,661	Valid
KPA9	0,594	0,716	<b>0,806</b>	0,640	Valid
KPA10	0,368	0,490	<b>0,631</b>	0,456	Valid
PS1	0,618	0,682	0,615	<b>0,848</b>	Valid
PS2	0,579	0,748	0,719	<b>0,841</b>	Valid
PS3	0,600	0,657	0,682	<b>0,835</b>	Valid
PS4	0,551	0,521	0,452	<b>0,649</b>	Valid
PS5	0,584	0,558	0,528	<b>0,764</b>	Valid
PS6	0,652	0,644	0,678	<b>0,814</b>	Valid
PS7	0,597	0,605	0,602	<b>0,808</b>	Valid
PS8	0,702	0,770	0,706	<b>0,875</b>	Valid
PS9	0,713	0,726	0,668	<b>0,863</b>	Valid
PS10	0,693	0,636	0,571	<b>0,837</b>	Valid

Discriminant validity was evaluated using the Heterotrait-Monotrait Ratio (HTMT) and cross loadings criteria. As shown in Table 2, all HTMT values are below the recommended threshold of 0.90, ranging from 0.720 to 0.864. This indicates that each construct is empirically distinct and that the model satisfies the requirements for discriminant validity. Furthermore, the results of the cross loadings presented in Table 3 show that each indicator has the highest loading on its respective construct compared to other constructs. Specifically, all indicators of Good Governance (GG), Human Capital (HC), Quality of Budget Management (KPA), and Stunting Financing (PS) exhibit stronger correlations with their intended constructs than with others. This confirms the absence of cross-loading issues among variables. Overall, these findings demonstrate that the measurement model meets the criteria for discriminant validity, ensuring that each construct is conceptually and empirically distinct, and suitable for further structural model analysis.

**Table 3. Reliability Test**

Variable	Cronbach's Alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Explanation
GG	0,916	0,925	0,930	Reliable
HC	0,910	0,926	0,925	Reliable
KPA	0,908	0,918	0,925	Reliable
PS	0,943	0,947	0,952	Reliable

The reliability of the measurement model was assessed using Cronbach's Alpha and Composite Reliability (rho\_a and rho\_c). As presented in Table 4, all constructs exhibit Cronbach's Alpha values above the recommended threshold of 0.70, ranging from 0.908 to 0.943, indicating a high level of internal consistency. In addition, the composite reliability values (rho\_a and rho\_c) for all variables are also above 0.90, demonstrating strong construct reliability. Specifically, Good Governance (GG), Human Capital (HC), Quality of Budget Management (KPA), and Stunting Financing (PS) all meet the criteria for reliability. Overall, these results confirm that the measurement model has excellent internal consistency and reliability, indicating that all constructs are reliable and suitable for further analysis.

**Table 4. R Square (R2) and adjusted R-square values for endogenous variables**

Variable	R-square	R-square adjusted
Quality of Budget Management (Y)	0,751	0,746
Good Governance (Z)	0,554	0,547

The coefficient of determination (R<sup>2</sup>) was used to assess the explanatory power of the structural model. As presented in Table 5, the R<sup>2</sup> value for Stunting Financing (Y) is 0.751, indicating that 75.1% of the variance in stunting financing is explained by the independent variables included in the model. This suggests that the model has strong explanatory power. Meanwhile, the R<sup>2</sup> value for Good Governance (Z) is 0.554, which indicates that 55.4% of the variance in good governance is explained by Quality of Budget Management and Human Capital. This value reflects a moderate to substantial level of explanatory capability. The adjusted R<sup>2</sup> values, which account

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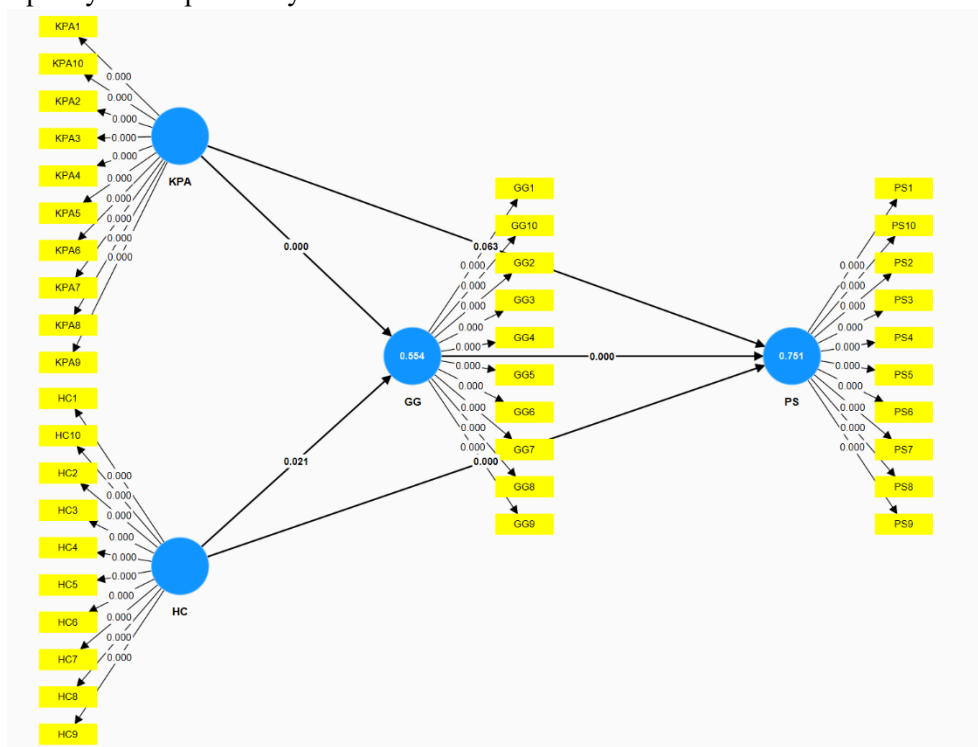
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for model complexity, are 0.746 for stunting financing and 0.547 for good governance, confirming the robustness of the model. Overall, these results indicate that the structural model demonstrates adequate predictive relevance and explanatory strength.

**Table 5. F Square (f<sup>2</sup>) Values on Variables**

Variable	F2 Value of Endogenous Variables of Stunting Financing	Explanation
<b>Good Governance</b>	0,230	Currently
<b>Human Capital</b>	0,244	Currently
<b>Quality of Budget Management</b>	0,034	Small

The effect size (f<sup>2</sup>) was evaluated to determine the magnitude of the impact of each exogenous variable on the endogenous variable, namely Stunting Financing. As presented in Table 6, Good Governance and Human Capital exhibit f<sup>2</sup> values of 0.230 and 0.244, respectively, indicating a moderate effect size on stunting financing. In contrast, Quality of Budget Management shows an f<sup>2</sup> value of 0.034, which falls into the small effect size category. This suggests that, although budget management quality contributes to the model, its direct influence on stunting financing is relatively limited compared to other variables. Overall, these findings indicate that Human Capital and Good Governance play more substantial roles in influencing stunting financing, while the effect of budget management quality is comparatively weaker in the structural model.



**Figure 2. Path Analysis SEM PLS**

The structural model illustrates the relationships among Quality of Budget Management (KPA), Human Capital (HC), Good Governance (GG), and Stunting Financing (PS). The model shows that both KPA and HC have significant effects on GG, indicating that improvements in budget management quality and human resource capacity contribute to better governance practices. Furthermore, Good Governance (GG) has a significant positive effect on Stunting Financing (PS), highlighting its critical role in ensuring the effectiveness of program implementation. The model also indicates that Human Capital (HC) directly influences stunting financing, while the direct effect of Quality of Budget Management (KPA) on stunting financing appears weaker in comparison.

The coefficient of determination (R<sup>2</sup>) values presented in the model show that Good Governance (GG) is explained by KPA and HC with an R<sup>2</sup> of 0.554, while Stunting Financing (PS) is explained by all variables in the

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model with an R<sup>2</sup> of 0.751. These values indicate that the model has moderate to strong explanatory power Overall, the structural model confirms that Good Governance plays a central mediating role, linking budget management quality and human capital to the effectiveness of stunting financing. This finding emphasizes the importance of governance mechanisms in translating resources and capacities into improved program outcomes.

**Table 6 Results of the Direct Influence Test on the Structural Model**

Hypothesis	Direct effect	Original Sample (O)	T Statistics (>1,96)	P Values (<0,05)	Explanation
1	KPA X <sub>1</sub> – PS Y	0,167	1,857	0,063	No Signifikan
2	HC X <sub>2</sub> – PS Y	0,428	4,305	0,000	Signifikan
4	KPA X <sub>1</sub> – GG Z	0,473	3,817	0,000	Signifikan
5	HC X <sub>2</sub> - GG Z	0,309	2,317	0,021	Signifikan
7	GG Z – PS Y	0,358	4,439	0,000	Signifikan

The results of the direct effect test on the structural model are presented in Table 6. The findings indicate that not all hypothesized relationships are statistically significant Specifically, Quality of Budget Management (KPA) does not have a significant direct effect on Stunting Financing (PS), as indicated by a coefficient of 0.167, T-statistic of 1.857, and P-value of 0.063 (>0.05). This suggests that improvements in budget management quality alone are insufficient to directly enhance stunting financing outcomes. In contrast, Human Capital (HC) has a positive and significant effect on stunting financing, with a coefficient of 0.428, T-statistic of 4.305, and P-value of 0.000. This result highlights the critical role of human resource capacity in improving the effectiveness of program financing Furthermore, both Quality of Budget Management (KPA) and Human Capital (HC) have significant positive effects on Good Governance (GG), with coefficients of 0.473 and 0.309, respectively. These findings indicate that improvements in financial management practices and human resource capabilities contribute to better governance. Additionally, Good Governance (GG) significantly influences Stunting Financing (PS), with a coefficient of 0.358, T-statistic of 4.439, and P-value of 0.000. This underscores the importance of governance as a key determinant of effective program financing. Overall, the results demonstrate that while budget management quality does not directly affect stunting financing, it plays an indirect role through governance. Meanwhile, human capital and good governance emerge as significant determinants of stunting financing within the structural model.

**Table 7 Results of the Indirect Effect Test (Mediation) of the Structural Model**

Hypothesis	indirect effect	Original Sample (O)	T Statistics (>1,96)	P Values (<0,05)	Explanation
8	KPA X <sub>1</sub> - Z - Y	0,169	2,901	0,004	Signifikan
9	HGX <sub>2</sub> - Z - Y	0,111	0,912	0,056	No Signifikan

The results of the indirect effect test are presented in Table 7, which examines the mediating role of Good Governance (GG) in the relationships between the independent variables and Stunting Financing (PS). The findings show that Good Governance significantly mediates the relationship between Quality of Budget Management (KPA) and Stunting Financing (PS). This is indicated by a coefficient of 0.169, a T-statistic of 2.901 (>1.96), and a P-value of 0.004 (<0.05). This result suggests that the effect of budget management quality on stunting financing is transmitted through governance mechanisms.

In contrast, Good Governance does not significantly mediate the relationship between Human Capital (HC) and Stunting Financing (PS). The indirect effect coefficient is 0.111, with a T-statistic of 0.912 (<1.96) and a P-value of 0.056 (>0.05). This indicates that the influence of human capital on stunting financing occurs primarily through a direct pathway rather than through governance. Overall, these results confirm that Good Governance functions as a selective mediator, effectively linking budget management quality to stunting financing, but not mediating the effect of human capital.

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**Table 8. Results of Path Analysis Test (Mediation) of Structural Model**

indirect effect	Original Sample (O)	T Statistics (>1,96)	P Values (<0,05)	Explanation	Types of Mediation
X <sub>1</sub> - Y	0,167	1,857	0,063	No Signifikan	Partially Mediate
X <sub>1</sub> - Z - Y	0,169	2,901	0,004	Signifikan	Perfect Mediating
X <sub>2</sub> - Y	0,428	4,305	0,000	Signifikan	No Signifikan
X <sub>2</sub> - Z - Y	0,111	1,912	0,056	No Signifikan	

The results of the path analysis are presented in Table 8, which provide a comprehensive evaluation of both direct and indirect relationships among variables, as well as the type of mediation. The findings indicate that the direct effect of Quality of Budget Management (X<sub>1</sub>) on Stunting Financing (Y) is not statistically significant ( $\beta = 0.167$ ;  $T = 1.857$ ;  $P = 0.063$ ). However, the indirect effect through Good Governance (Z) is significant ( $\beta = 0.169$ ;  $T = 2.901$ ;  $P = 0.004$ ). This suggests that Good Governance partially mediates the relationship between budget management quality and stunting financing. In contrast, Human Capital (X<sub>2</sub>) has a significant direct effect on stunting financing ( $\beta = 0.428$ ;  $T = 4.305$ ;  $P = 0.000$ ), while its indirect effect through Good Governance is not significant ( $\beta = 0.111$ ;  $T = 1.912$ ;  $P = 0.056$ ). These results indicate that no mediation effect occurs, and the influence of human capital on stunting financing is primarily direct.

Overall, the results demonstrate that Good Governance acts as a partial mediator in the relationship between budget management quality and stunting financing, while it does not mediate the effect of human capital. This highlights the differing mechanisms through which financial management and human resource capacity influence program outcomes. The findings of this study provide important insights into the determinants of stunting financing within the context of public sector governance. First, the results reveal that budget management quality does not have a direct significant effect on stunting financing, suggesting that administrative improvements in financial management alone are insufficient to enhance program outcomes. This finding is consistent with previous studies indicating that increased budget allocation or improved financial procedures do not automatically translate into effective program implementation without adequate governance mechanisms (The World Bank, 2020). In many developing regions, inefficiencies in budget execution and weak institutional coordination often limit the impact of public spending. However, this study finds that budget management quality significantly influences good governance, which in turn affects stunting financing. This highlights the indirect role of financial management through governance structures. Similar findings were reported by (Andrews et al., 2017), who emphasized that public financial management reforms are more effective when supported by strong governance systems that ensure accountability and transparency. Thus, governance acts as a bridging mechanism between financial inputs and development outcomes.

Second, the results demonstrate that human capital has a strong and significant direct effect on stunting financing. This confirms that the capacity, skills, and competencies of human resources play a critical role in the successful implementation of public health programs. This finding aligns with the human capital theory proposed by (Becker, 2001) and is further supported by recent empirical studies showing that skilled personnel significantly improve the effectiveness of service delivery and program management (The World Bank, 2020). In the context of stunting reduction, competent human resources are essential for planning, coordination, and monitoring program activities. Furthermore, good governance is found to have a significant positive effect on stunting financing, reinforcing its role as a key determinant of program effectiveness. This result is consistent with studies by Kaufmann et al. (2010), which highlight that governance quality particularly transparency, accountability, and institutional effectiveness directly influences development outcomes. Effective governance ensures that resources are allocated efficiently and programs are implemented according to their intended objectives.

The mediation analysis further reveals that good governance partially mediates the relationship between budget management quality and stunting financing, but does not mediate the relationship between human capital and stunting financing. This indicates that while financial management requires governance mechanisms to be effective, human capital exerts a more direct operational influence. Similar conclusions were drawn by (Grindle, 2017), who argued that governance systems are essential for institutional processes, whereas human capacity directly affects service delivery performance. Overall, this study confirms that the effectiveness of stunting financing is not solely determined by financial resources, but rather by the interaction between governance quality and human capital capacity. These findings support the growing body of literature emphasizing that improving

# AN ANALYSIS OF THE EFFECTS OF BUDGET MANAGEMENT QUALITY, HUMAN CAPITAL, AND CROSS-SECTOR COLLABORATION ON STUNTING FINANCING WITH GOOD GOVERNANCE AS A MEDIATING VARIABLE AT COMMUNITY HEALTH CENTERS IN TIMOR TENGAH SELATAN REGENCY

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development outcomes requires not only adequate funding but also strong institutions and capable human resources.

## CONCLUSION

This study examines the influence of budget management quality and human capital on stunting financing, with good governance as a mediating variable in public health centers in Timor Tengah Selatan Regency. The findings indicate that budget management quality does not have a direct significant effect on stunting financing, suggesting that improvements in administrative financial processes alone are insufficient to enhance program effectiveness. However, budget management quality significantly influences good governance, which in turn affects stunting financing. In contrast, human capital demonstrates a strong and significant direct effect on stunting financing, highlighting the critical role of human resource capacity in program implementation. Additionally, good governance is found to have a significant positive impact on stunting financing, confirming its importance as a key determinant of effective public program management.

The mediation analysis reveals that good governance partially mediates the relationship between budget management quality and stunting financing, while it does not mediate the relationship between human capital and stunting financing. This indicates that financial management requires governance mechanisms to be effective, whereas human capital exerts a direct influence on program outcomes. Overall, the study concludes that the effectiveness of stunting financing is largely determined by the synergy between governance quality and human capital, rather than solely by the quality of budget management. These findings contribute to the literature on public financial management and governance by emphasizing the importance of institutional quality and human resource capacity in achieving effective development outcomes, particularly in the context of local health services.

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