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ANALYSIS OF THE EFFECT OF BUDGETING SYSTEM AND OPERATIONAL RISK ON THE FINANCIAL PERFORMANCE OF HOUSING DEVELOPER COMPANIES

Oma Nuryanto[1], Rukmini[2], Sri Laksmi Pardanawati[3]
[1,2,3] AAS Indonesia Institute of Business and Technology, Surakarta
E-mail: [1]omanuryanto7@gmail.com, [2]rukmini.stie.aas@gmail.com, [3]laksmi.stie.aas@gmail.com

Abstract: This study aims to examine the effect of the budgeting system and operational risk on the financial performance of housing developer companies in the Solo Raya region. The research population consists of 34 companies that are members of the Real Estate Indonesia (REI) Solo Raya Chapter. Data were collected using a structured questionnaire and analyzed using multiple linear regression with SPSS. The results show that the budgeting system has a positive and significant effect on financial performance, with a significance value of 0.028 (< 0.05). Meanwhile, operational risk does not have a significant partial effect, although it contributes jointly with the budgeting system in influencing financial performance, as indicated by a significance value of 0.002 in the F-test. The coefficient of determination (Adjusted R^2) is 0.299, indicating that 29.9% of the variation in financial performance can be explained by the two independent variables. These findings highlight the importance of strengthening the budgeting process and maintaining effective risk management practices in order to enhance financial performance.

Keywords: *budgeting system, operational risk, financial performance, housing developer*

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1. Introduction

The housing industry in Indonesia continues to grow alongside the increasing population and rapid urbanization. Housing developer companies play a crucial role in providing dwellings that meet market demands. However, these companies often face various challenges, both operational and financial, that can affect their financial performance. In this context, effective management of budgeting systems and operational risk management are two important factors influencing the financial performance of housing developer companies (Kasmir, 2018).

A well-designed budgeting system enables companies to plan and allocate resources efficiently, as well as monitor and control cash flows to align with predetermined goals (Mulyadi, 2019). Inaccurate budgeting can lead to resource wastage, difficulties in fulfilling financial obligations, and decreased profitability. This is particularly critical considering that large-scale housing projects typically involve significant investments and extended construction periods, requiring companies to have well-thought-out financial planning to avoid fatal mistakes in fund management (Sutrisno, 2020).

In addition to budgeting, operational risk is also a factor that influences financial performance. Operational risks in the context of housing developers include issues such as construction delays, surges in raw material prices, changes in government regulations, and fluctuations in market demand that can disrupt project progress (Kurniawan, 2020). Companies that fail to manage these risks effectively are at risk of incurring substantial losses, which in turn will reduce their financial performance. Therefore, it is important for companies to implement effective risk control systems to minimize the negative impacts on their operations and finances.

Proper management of both factors—efficient budgeting systems and optimal operational risk management—is expected to improve the financial performance of housing developer companies. Based on this background, this study aims to analyze the influence of budgeting systems and operational risks on the financial performance of housing developer companies, thereby providing deeper insights into the importance of these factors in achieving sustainable financial goals.

2. Research Method

2.1. Population and Sample

The population of this study consists of 34 housing developer companies operating in Surakarta, registered under the Real Estate Indonesia (REI) Komisariat Solo Raya. Due to the relatively small population size, this study employs a census sampling technique, where the entire population is used as the sample (Sugiyono, 2018).

2.2. Data and Data Collection Techniques

This study utilizes a quantitative approach with an associative method. The data consist of primary data collected through questionnaires distributed to managers responsible for budgeting and operational risk management, and secondary data obtained from company financial reports and documentation. The questionnaire employs a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) to measure the implementation of budgeting systems and operational risk management (Sugiyono, 2018).

a. Variables and Operational Definitions
   The independent variables in this study are budgeting system and operational risk, while the dependent variable is financial performance. The operationalization of variables is based on established indicators, including documentation, cross-divisional participation, budget evaluation, risk documentation, and financial performance indicators such as profitability and liquidity ratios.
b. Validity and Reliability Tests
   Instrument validity was tested using Pearson's Product-Moment correlation, with items considered valid if the correlation coefficient exceeds the critical value at a 5% significance level. Reliability was assessed with Cronbach's Alpha, where values above 0.60 indicate acceptable reliability (Ghozali, 2016). The reliability test yielded a Cronbach's Alpha of 0.933, confirming that the instrument is valid and reliable.
c. Classical Assumption Tests
   Classical assumption tests were conducted to ensure the regression model's adequacy, including normality (Shapiro-Wilk or Kolmogorov-Smirnov test), multicollinearity (Variance Inflation Factor), homoscedasticity (Breusch-Pagan and White tests), and autocorrelation (Durbin-Watson test). These tests ensure the validity and reliability of the regression analysis results (Wooldridge, 2013).

d. Data Analysis Techniques

Multiple linear regression analysis was employed to examine the influence of budgeting systems and operational risk on financial performance. Hypothesis testing included the F-test to assess the overall model significance, t-tests to evaluate the significance of individual independent variables, and the coefficient of determination (R^2) to determine the model's explanatory power regarding data variability (Widarjono, 2013)

3. Results and Discussion

3.1. Results

Respondent Data

This study involved respondents from 34 housing developer companies registered under the Real Estate Indonesia (REI) Komisariat Solo Raya. Each respondent holds a role that involves direct knowledge of the company's financial and operational conditions, such as financial managers, project managers, or business owners. The demographic profile of the respondents was collected through a questionnaire, and is summarized in the table below:

Table 1. Respondent Demographics

Gender	Frequency	Persentage
Male	23	73,5%
Female	9	26,5%
Total	34	100%

The majority of respondents were male, indicating a dominance of men in decision-making roles within the property development sector.

Classical Assumption Tests

Classical assumption tests were conducted to assess the reliability and validity of the regression model. These include normality, multicollinearity, homoscedasticity, and autocorrelation tests.

1) Normality Test

Normality was tested using the One-Sample Kolmogorov-Smirnov (K-S) method. The results are as follows:

Table 2. Kolmogorov-Smirnov Test Results

Test Statistic	Value
Sample Size (N)	34
K-S Statistic (Absolute)	0.095
Asympotic Significance (2-tailed)	0.200
Monte Carlo Significance (2-tailed)	0.596

Since the Monte Carlo significance value is 0.596 (> 0.05), the residuals are normally distributed, fulfilling the normality assumption.

2) Multicollinearity Test

This test examines whether high correlations exist between independent variables. Indicators used are Tolerance (> 0.10) and Variance Inflation Factor (VIF < 10).

Table 3. Multicollinearity Test Results

Variable	Tolerance	VIF
Budgeting System	0.761	1.314
Operational Risk	0.761	1.314

All tolerance values exceed 0.10 and VIF values are below 10, indicating the absence of multicollinearity.

3) Homoscedasticity Test
The Glejser test was used to examine whether residuals have constant variance. The significance values for both variables were above 0.05 (Budgeting System: 0.495; Operational Risk: 0.918), suggesting that the model meets the homoscedasticity assumption.
4) Autocorrelation Test
The Durbin-Watson test was used to detect autocorrelation in the residuals. Since dU < DW < 4 – dU (1.580 < 1.746 < 2.420), no autocorrelation is detected, indicating that residuals are independent.

Hypothesis Testing

1) Multiple Linear Regression Analysis
The regression equation obtained is:

$$Y = 4.740 + 0.379X_1 + 0.295X_2$$

Where**:**
   a) Y = Financial Performance
   b) X_1 = Budgeting System
   c) X_2 = Operational Risk

Interpretation:
   a) The constant (4.740) suggests the base level of financial performance when both independent variables are zero.
   b) A one-unit increase in the budgeting system (X_1) is associated with an increase in financial performance by 0.379 units, holding other factors constant.
   c) A one-unit increase in operational risk (X_2) corresponds to a 0.295 increase in financial performance, though this may not be statistically significant.

2) F-Test (Model Fit Test)
The F-test assesses whether the independent variables jointly influence the dependent variable. **F-statistic**: 8.021 and **Significance**: 0.002. Since the p-value is < 0.05, the model is statistically significant, indicating that the budgeting system and operational risk jointly affect financial performance.
3) t-Test (Partial Significance Test)
This test evaluates the individual effect of each independent variable.

Table 4. t-Test Results

Variable	Coefficient (B)	t-value	Sig.	Interpretation
Budgeting System	0.379	2.313	0.028	Significant (p < 0.05)
Operational Risk	0.295	1.720	0.095	Not Significant (p > 0.05)

The budgeting system has a significant partial effect on financial performance. Operational risk does not have a statistically significant partial effect.

4) Coefficient of Determination (R^2)
This test measures how much variance in the dependent variable is explained by the independent variables.

Table 5. R-Squared Results

Statistic	Value
R	0.584
R Square	0.341
Adjusted R Square	0.299
Standard Error Estimate	1.823

The Adjusted R Square of 0.299 indicates that 29.9% of the variation in financial performance is explained by the budgeting system and operational risk. The remaining 70.1% is influenced by other factors not included in this model.

3.2. Discussion

The Influence of Budgeting System on Financial Performance

The results of the t-test indicate that the budgeting system has a significant influence on financial performance, with a significance value of 0.028 (< 0.05). This finding suggests that the more effective and structured the budgeting system implemented by the company, the better its financial performance will be.

This result is in line with Mulyadi (2019), who stated that a well-designed budgeting system serves as an essential tool for planning and control. It ensures efficient and measurable use of resources, enabling organizations to monitor expenditures, evaluate outcomes, and make informed financial decisions.

Moreover, the findings support the research by Dendy Syaiful Akbar and Ruhiyat (2016), which showed that performance-based budgeting positively impacts the financial performance of local governments. Although their study was conducted in the public sector, the principles of performance-based budgeting are equally applicable in the private sector, including among property developers. A structured and participatory budgeting process allows management to evaluate financial target achievements and identify areas requiring improvement, thereby enhancing overall financial health and accountability.

The Influence of Operational Risk on Financial Performance

Based on the t-test results, operational risk does not have a significant partial influence on financial performance, as indicated by the significance value of 0.095 (> 0.05). This implies that operational risk, when assessed individually, does not exert a strong influence on changes in the financial performance of the company.

However, the F-test shows that operational risk, in combination with the budgeting system, contributes significantly to the model (F significance = 0.002). This indicates that while operational risk may not independently impact financial performance, it still plays a role when considered alongside other managerial factors.

This finding is consistent with the study by Dayana and Untu (2019) published in Jurnal EMBA, which concluded that operational risk did not have a statistically significant partial effect on the financial performance of regional development banks, though it contributed jointly with other types of risks. The implication is that the impact of operational risk can be mitigated or absorbed if the company has effective internal control systems and risk management strategies in place. These mechanisms can buffer the adverse effects of operational uncertainties, preserving the stability of financial outcomes.

In summary, the study highlights the critical role of a robust budgeting system in driving financial performance and suggests that operational risks, while important, may have a more nuanced or indirect effect, especially in companies with adequate governance frameworks.

4. Conclusion

Based on the findings regarding the influence of the budgeting system and operational risk on the financial performance of housing developer companies, the following conclusions can be drawn:

a. The Budgeting System has a significant effect on Financial Performance.
   The t-test results indicate a positive and statistically significant relationship between the budgeting system and financial performance, with a significance value of 0.028 (< 0.05). This suggests that improvements in the quality and effectiveness of the budgeting system positively contribute to enhancing the financial performance of the company.
b. Operational Risk does not have a significant partial effect on Financial Performance.
   The t-test results show that operational risk has a significance value of 0.095 (> 0.05), indicating no significant individual effect on financial performance. However, the simultaneous test (F-test) confirms that operational risk still contributes collectively with the budgeting system in influencing financial performance.

References

Akbar, D.S., & Ruhiyat. 2016. Pengaruh Penerapan Anggaran Berbasis Kinerja Terhadap Kinerja Keuangan Pemerintah. Jurnal Wawasan dan Riset Akuntansi. Vol. 3, No. 2, Maret 2016.

Dayana, P., & Untu, V. N. (2019). Analisis Risiko Pasar, Risiko Kredit, Risiko Operasional dan Kecukupan Modal terhadap Kinerja Keuangan Bank Pembangunan Daerah. Jurnal EMBA, 7(3), 3798–3807.

Ghozali, Imam. 2016. Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23 (Edisi 8). Cetakan ke VIII. Semarang: Badan Penerbit Universitas Diponegoro.

Kasmir. (2018). Analisis Laporan Keuangan. Jakarta: Rajawali Pers.

Kurniawan, F. (2020). Manajemen Risiko pada Proyek Konstruksi: Studi Kasus pada Pembangunan Perumahan. Bandung: CV Pustaka Setia.

Lestari, Marlinah, A., & Syarlis, M., F. (2022). Penyusunan laporan keuangan UMKM berdasarkan SAK EMKM menggunakan Microsoft Excel (Studi kasus pada UD. Tani Maju di Kec. Biringbulu Kab. Gowa). *Malomo: Jurnal Ekonomi, Akuntansi dan Manajemen*, 4(1), 1–9. https://e-jurnal.nobel.ac.id/index.php/malomo/article/view/3650

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). SAGE Publications.

Moleong, L. J. (2017). *Metodologi Penelitian Kualitatif* (Edisi Revisi). Bandung: PT Remaja Rosdakarya.

Mulyadi. (2019). Akuntansi Manajemen. Jakarta: Salemba Empat.

Putra, G. D., Wulandari, R., & Fajri, F. A. (2019). Penyusunan Laporan Keuangan dengan Microsoft Excel pada CV. Multi Karya Sejahtera. *Tugas Akhir, D3 Akuntansi*. Retrieved from https://repository.example.ac.id/handle/123456789/1234

Putri, M. A., & Puspita, D. A. (2024). Desain laporan keuangan UMKM berdasarkan SAK EMKM berbasis Microsoft Excel (Studi kasus UMKM Kripik Nangka

Megawati). *Jurnal Pengabdian Kolaborasi dan Inovasi IPTEKS*, 2(1), 45–53. https://journal.ppmi.web.id/index.php/JPKI2/article/view/390

Romney, M. B., & Steinbart, P. J. (2015). *Accounting Information Systems* (13th ed.). Pearson Education.

Sugiyono. 2018. Metode Penelitian Kuantitatif, Kualitatig, dan R&D. Bandung: Alfabeta.

Suryanti, N., Prabowo, A. E., Suyono, A., & Pratiwi, H. E. (2023). *Pengembangan Pembuatan Laporan Keuangan Dengan Ms. Excel Pada UMKM: Menuju Manajemen Keuangan Yang Profesional*. Jurnal Pendidikan Ekonomi dan Kewirausahaan, 7(2). https://doi.org/10.29408/jpek.v7i2.24058e-Journal Hamzanwadi+1Jurnal UMMAT+1

Sutrisno. 2020. Manajemen Keuangan: Teori Konsep dan Aplikasi. Yogyakarta: Ekonisia.

Widarjono, A. (2013). Ekonometrika: Teori dan Aplikasi dengan Eviews (3rd ed.). UPP STIM YKPN.

Wooldridge, J. M. (2013). Introductory Econometrics: A Modern Approach (5th ed.). Cengage Learning.