An Analysis of Financial Distress in Village-Owned Enterprises (BUM Desa) in Gorontalo Regency

Nurmat Djou[1], Julie Abdullah[2], Onong Junus[3], Saprudin[4]
[1,2,3,4] *University of Gorontalo, Indonesia*

ABSTRACT

This study aims to analyze the financial distress conditions of Village-Owned Enterprises (BUM Desa) in Gorontalo Regency. This research uses a quantitative approach with descriptive data analysis techniques using the Springate S-Score model. Data collection was conducted through documentation methods, including stages such as collecting financial reports, performing financial ratio analyses, conducting financial distress analysis, and drawing research conclusions. The financial report data analyzed spans five years (2019–2023), constituting a time-series dataset. The results of the study indicate that, in general, BUM Desa in Gorontalo Regency are not experiencing financial distress. Of the six BUM Desa analyzed, three consistently demonstrated sound financial health over the five-year period, two exhibited fluctuations in financial performance but overall remained within the healthy category, and only one showed a low Springate score. However, this score was not sufficient to classify the enterprise as significantly distressed, as it continued to demonstrate ongoing business activities and adequate liquidity. Thus, it can be concluded that, overall, BUM Desa in Gorontalo Regency are in a financially healthy condition.

INTRODUCTION

Village-Owned Enterprises (BUM Desa) are village economic institutions established in order to improve the welfare of village communities through independent and sustainable management of local potential. The establishment of BUM Desa has gained legal legitimacy through Law No. 6/2014 on Villages, where Article 1 paragraph (6) states that BUM Desa is a business entity whose capital is wholly or partially owned by the village and directly managed for the greatest prosperity of the village community. This legality is further strengthened through Government Regulation Number 11 of 2021 and a number of other relevant ministerial regulations (Ambarwati & Assiddiq, 2024).

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Conceptually, BUM Desa has two main functions: as a local economic driver and as an instrument for strengthening village institutions. Through these roles, BUM Desa is expected to create jobs, foster local entrepreneurship, and increase village income. However, in practice, many BUM Desa have failed in business management. This can be seen from data from the Gorontalo District Community and Village Empowerment Office (2022) which notes that of the 189 BUM Desa that have been established, only 52 (28%) are actively operating, while the rest are in a less active or inactive condition.

This phenomenon shows that most BUM Desa face fundamental problems in business governance, including in the financial aspect. Common problems identified include: lack of planning based on business feasibility analysis, weak management capacity, lack of financial transparency and accountability, and unavailability of proper financial reports (Djafar et al., 2024 ; Abdullah et al., 2024) . This condition reflects the early symptoms of financial distress, which is a condition of declining financial health that has the potential to lead to bankruptcy if not addressed immediately (Platt & Platt in Sartika Putri et al., . 2020)

In the context of the literature, financial distress has been an important study theme in finance and accounting since the last few decades. According to Judijanto et al. (2024)), the number of academic publications on this topic reached 980 papers with a total citation of more than 130 thousand times, indicating that this issue has high academic appeal. However, the majority of research related to financial distress prediction is mostly conducted on large companies such as issuers on the Indonesia Stock Exchange (IDX), SOEs, or other private sectors (Indriani et al., 2014). (2023) . According to Resfitasari et al. (2022) Research that examines the financial condition of small-scale entities such as BUM Desa is still very limited.

There are various prediction models like the Altman Z-Score, Zmijewski, and Springate which have been utilized in estimating the looming bankruptcy of an organization. Of all the models, the Springate approach is said to be most accurate in identifying severe financial problems, particularly in pre-initial public offering firms (Munawarah, 2020 ; Supriati et al., 2019) . This approach integrates four key ratios and creates a score (S-Score) which may assist in identifying whether an organization has a good condition or might default.

Previous studies such as those conducted by Romaniyah & Alfian (2024) and Alamsyah (2019) prove that predictive financial distress models can be used at the scale of MSMEs and cooperatives, even producing valid indicators of potential bankruptcy in the informal sector. However, the application of this method in the context of BUM Desa is still very rare. In fact, based on the

findings of Rahayu & Paramita (2021) , some BUM Desa have shown indicators of financial distress such as low liquidity and dependence on short-term debt.

Based on these conditions, it is important to conduct research on financial distress analysis on BUM Desa in Gorontalo Regency, especially to provide an empirical picture of BUM Desa's financial performance and provide strategic input for village stakeholders in improving the financial management system and overall business governance. This research is also expected to enrich the treasure of financial accounting literature in the context of village-based local economic entities.

RESEARCH METHOD

This research uses a quantitative approach with a causal associative research type. The research objects are six active BUM Desa in Gorontalo Regency that have complete financial reports for the 2019-2023 period. The data used is secondary data from annual financial reports, which includes information on assets, liabilities, profits, and sales. The examination was done with the Springate method (S-Score) which computes four financial ratios which are: Working Capital to Total Assets, Earnings Before Interest and Tax to Total Assets, Earnings Before Tax to Current Liabilities, and Sales to Total Assets. The results obtained from these computations help determine the financial condition of BUM Desa and whether the entity is healthy or suffering economic distress.

The formula used in the Springate S-Score model is as follows:

$$S = 1.03A + 3.07B + 0.66C + 0.4D$$

Where:

A: Working Capital to Total Assets

B: Earning Before Interest and Tax to Total Assets

C: Earning Before Tax to Current Liabilities

D: Sales to Total Assets

S: Financial Distress Index

With conditions:

S < 0.862 = unhealthy/distress, and S > 0.862 = healthy.

RESULT AND DISCUSSION

This study seeks to evaluate the financial distress of Village-Owned Enterprises (BUM Desa) in Gorontalo Regency using the Springate model (S-Score). The study was conducted on six active BUM Desa with complete financial reports for the period 2019-2023. The model uses 4 fundamental ratios which include: Working Capital to Total Assets (WCTA), Earnings Before

Interest and Taxes to Total Assets (EBITTA), Earnings Before Tax to Current Liabilities (EBTCL), and Sales to Total Assets (STA) to produce an S-Score which indicates the entity's financial condition.

Working Capital to Total Assets (A)

The ratio of Working Capital to Total Assets (WCTA), measures the extent to which working capital is utilized to sustain operations and assist in the expansion of assets at BUM Desa in Gorontalo Regency. Based on our research findings, BUM Desa Iloheluma (BHIL) is the only desa that has consistently maintained the highest ratio A value on a yearly basis for the entire period of 2019 to 2023, achieving a perfect score of 1,000 every year. This shows that all or most of BHIL's assets are fully supported by working capital and devoid of current liabilities, indicating an optimally healthy and liquid financial condition. On the contrary, BUM Desa Sinar Usaha Tabongo Timur (BSUT) reported the lowest A ratio, experiencing a shocking decline all the way down to 0.010 in 2022, indicating severely poor working capital management and overreliance on long-term assets. Also, BUM Desa Isimu Utara (BAIU) maintained some latency with A ratio oscillating between 0.864 and 0.894, which denotes reasonable liquidity together with favorable capital in relation to the proportion of outflowing funds. BUM Desa Bina Usaha Daenaa (BBUD) showed a declining A-ratio trend from 0.970 in 2019 to 0.625 in 2023. This was attributed to an increase in current liabilities without a corresponding rise in current assets. Other BUM Desa such as Makmur Bersama Motinelo (BMBM) and Tunas Harapan Ombulo (BTHO) exhibit volatility in ratio values, with BMBM facing a steep drop and BTHO showing positive improvements year on year. Overall, these findings indicate that BUM Desa's level of managing working capital to sustain the asset base tends to result in a disparate outcome, which subsequently affects the financial balance and condition of each BUM Desa.

Earnings before Interest and Tax (B)

The ratio of Earnings Before Interest and Taxes to Total Assets (EBIT to Total Assets) is used to measure the efficiency of BUM Desa in utilizing its assets to generate operating profit. The results showed that BUM Desa Iloheluma (BHIL) consistently recorded the best performance, with a significant increase from 0.018 in 2019 to 0.252 in 2022, and a slight decrease to 0.162 in 2023. These achievements reflect efficient and productive asset management. In contrast, BUM Desa Sinar Usaha Tabongo Timur (BSUT) recorded the worst performance, even posting a negative value (-0.059) in 2019 and remaining low in subsequent years, indicating a weak ability to generate profits from its assets. BUM Desa Bina Usaha Daenaa (BBUD) showed sharp fluctuations, with the

highest ratio of 0.150 in 2022 but falling to 0.045 in 2023, indicating operational instability. BUM Desa Isimu Utara (BAIU) experienced a gradual downward trend from 0.120 to 0.042 in five years, reflecting a decline in asset utilization efficiency despite remaining in the positive zone. BUM Desa Makmur Bersama Motinelo (BMBM) showed the most stagnant performance with a very low EBIT ratio (below 0.045), while Tunas Harapan Ombulo (BTHO) showed a positive growth trend, from 0.051 to 0.175 at the end of the period. Overall, this data reflects that most BUM Desa have challenges in optimizing their assets to generate sufficient operating profit.

Profit Before Tax to Current Liabilities (C)

The ratio of Profit Before Tax to Current Liabilities (EBT to Current Liabilities) reflects BUM Desa's ability to pay off short-term liabilities with operating profit before tax. The results show that most BUM Desa have no current liabilities (short-term debt), thus their C ratio value is technically zero. This can be seen in BUM Desa such as Isimu Utara (BAIU), Iloheluma (BHIL), and Sinar Usaha Tabongo Timur (BSUT), which for five consecutive years recorded a C ratio value of 0.000. This condition can be interpreted as being free of short-term debt, but on the other hand also signifies a lack of short-term funding activities that may be needed for business expansion or development. Meanwhile, BUM Desa Bina Usaha Daenaa (BBUD) recorded a very high C-value, reaching 197.464 in 2021 and 88.274 in 2022, although it declined to 4.209 in 2023, due to increased current liabilities. BUM Desa Tunas Harapan Ombulo (BTHO) also showed a positive performance with the highest ratio of 203.445 in 2023, indicating that its profit before tax is very capable of covering short-term liabilities. On the other hand, BUM Desa Makmur Bersama Motinelo (BMBM) recorded relatively low, but still positive C ratio values in the last two years, namely 2.574 in 2022 and 3.094 in 2023. In general, this data shows that the majority of BUM Desa have a very light liability structure, but only a minority actually show high efficiency in using profits to pay off short-term liabilities.

Sales to Total Assets (D)

The Sales to Total Assets ratio is used to measure the efficiency of BUM Desa in managing assets to generate business income. Based on the results of the study, there is significant variation among BUM Desa in Kabupaten Gorontalo in terms of operational effectiveness. BUM Desa Tunas Harapan Ombulo (BTHO) consistently shows the highest ratio compared to other BUM Desa, with the value peaking in 2020 at 1.124, which indicates that each unit of assets can generate more than one unit of revenue. This reflects high efficiency in asset utilization. In contrast, BUM Desa such as Sinar Usaha Tabongo Timur (BSUT) and Makmur Bersama Motinelo (BMBM) recorded very low D ratios,

ranging from 0.001 to 0.033, respectively, indicating low contribution of assets to business income. BUM Desa Isimu Utara (BAIU) recorded a gradual decline in D ratio from 0.048 in 2019 to only 0.015 in 2023, indicating a decline in asset productivity. BUM Desa Iloheluma (BHIL) showed a positive upward trend in the D ratio, from 0.045 in 2019 to 0.130 in 2022, before slightly dropping to 0.084 in 2023, reflecting good efficiency in the use of assets to generate sales. Meanwhile, Bina Usaha Daenaa (BBUD) showed quite high fluctuations, from 0.139 in 2019, jumping to 0.230 in 2020, then declining to 0.093 in 2023. Overall, these findings suggest that most BUM Desa still face challenges in optimizing assets to increase revenue sustainably.

Springate Calculation Results (S-Score)

From the outcome of the Springate value (S-Score) evaluation conducted on BUM Desa in Gorontalo Regency from the year 2019 to 2023, it can be summarized that the majority of BUM Desa are in a relatively good financial condition. Out from the 30 samples of financial statements analyzed (6 BUM Desa multiplied with 5 years), 23 samples were categorized as having a score greater than healthy (S-Score > 0.862) while the other 7 samples scored were classified as unhealthy (S-Score ≤ 0.862). This suggests that the average finance condition of BUM Desa during the period of study was approximately ample.

When reviewed by year, it can be seen that from 2019 to 2021 there were 4 healthy BUM Desa and 2 unhealthy BUM Desa, respectively. However, this condition improved in 2022 and 2023, where there were 5 BUM Desa classified as healthy and only 1 unhealthy in each of these years. Thus, it can be said that 2022 and 2023 were the healthiest periods overall for BUM Desa in Kabupaten Gorontalo.

As seen from the highest S-Score value, the BUM Desa with the healthiest condition is BBUD in 2021, with an S-Score value of 132,087. This score far exceeds the healthy category threshold. In addition, high scores were also found for BBUD in 2020 (82.440), BTHO in 2022 (110.421), and BTHO in 2023 (136.412).

Discussion

Based on the results of analysis using the Springate model of six active BUM Desa in Gorontalo Regency over the period 2019 to 2023, it was found that most BUM Desa are in a healthy financial condition. This is indicated by the S-Score value that exceeds the threshold of 0.862, as defined in the Springate model. Thus, the research hypothesis stating that BUM Desa experienced financial distress was not proven and statistically rejected. The rejection of this hypothesis is based on the finding that three of the six BUM Desa analyzed, namely BUM Desa Amanah Isimu Utara (BAIU), Huyula Iloheluma (BHIL),

and Bina Usaha Daenaa (BBUD), consistently showed S-Score values above the threshold for five consecutive years. BUM Desa BBUD, in particular, recorded a very high S-Score value in 2021 of 132.087, which was influenced by high ratios of sales to total assets (D) as well as profit before tax to current liabilities (C), signaling efficiency and effectiveness in asset management as well as the ability to meet short-term liabilities. Similarly, BUM Desa BHIL and BAIU recorded stable S-Score scores within the range of 1.069 to 1.919, reflecting strong financial structures and conservative yet productive business management. These findings indicate that the majority of BUM Desa in the research sample are not under serious financial stress, and have positive business sustainability prospects if managed consistently.

In contrast, the calculation results of the Springate model show that BUM Desa Sinar Usaha Tabongo Timur (BSUT) was consistently in the financial distress category during the observation period. BSUT's S-Score value was below the threshold of 0.862 in all years of observation, even touching the lowest point of 0.070 in 2019. This condition is caused by a combination of weak ratio values, namely ratio A (Working Capital to Total Assets), ratio B (EBIT to Total Assets), and ratio D (Sales to Total Assets) which are very low, and ratio C (EBT to Current Liabilities) which is stagnant at zero due to the absence of current liabilities. These findings indicate that the main problems faced by BSUT are not simply capital constraints, but rather weak business governance, low operational effectiveness, and a suboptimal revenue structure. Although in 2023 BSUT recorded an increase in S-Score value to 0.226, it is still not enough to get out of the distress category.

Phenomenas of interest were also observed on BUM Desa Makmur Bersama Motinelo (BMBM) and Tunas Harapan Ombulo (BTHO). BMBM struggled with an S-Score of 1.959 and 2.327 in 2022 and 2023 respectively, but simultaneously financially recovered during those years after experiencing three consecutive years of grueling, unhealthy financial conditions prior. This improvement was likely driven from the harboring of gross business income and newly arising current liabilities that shifted the C and D ratios positively. BUM Desa BTHO experienced an extraordinary leap in empirical data revolving around their financial management. The S-Score value rose from 0.734 in 2020 to 110.421 in 2022, with projections estimating continued growth to 136.412 in 2023. This shift suggests that managerial decisions or supporting policies were successful enough to significantly enhance financial performance as shown above.

Permanently, the trend noted of S-Score values reveals an overall increase year by year. At the starting point in 2019, two out of six BUM Desa were

considered financially unhealthy. This state remained up to 2021, but began to show marked improvement in 2022 and 2023 with only one BUM Desa remaining in the distress category. This trend demonstrates improvement in the overall governance of BUM Desa in Kabupaten Gorontalo which stems from internal enhancements like operational efficiency and better management, as well as external factors like training, increased supervision, and policy aid from the Village Government.

The findings in this study are consistent with the results of previous studies. Fitriani & Huda (2020) shows that entities with good financial management tend to be able to avoid financial distress, even in high-pressure sectors such as the aviation industry. In addition, the study Sulistiawati et al. (2021) reinforces the validity of using the Springate model, which is considered more accurate than the Altman model in detecting potential bankruptcy. Thus, the finding that most BUM Desa in this study are in a healthy financial condition has strong empirical support in terms of prediction methodology. Furthermore, the research results of Raisa Oma Putri et al. (2022)) that a high ratio of sales to total assets is positively correlated to a high S-Score value and healthy financial condition, which is also reflected in BUM Desa Bina Usaha Daenaa (BBUD) and Tunas Harapan Ombulo (BTHO) in this study. Research by Hamzah et al. (2022)) also reinforces these findings by emphasizing that operational efficiency and consistent liquidity management are key factors for companies to survive, even in volatile economic conditions. Thus, the findings of this study not only have contextual relevance to BUM Desa, but are also consistent with empirical trends in the finance literature regarding the prediction and prevention of financial distress.

In contrast, the results of this study show significant differences with the findings of Veronika et al. (2023)), which identified the majority of savings and loan cooperatives as being in financial distress. This difference may be due to variations in organizational structure, funding sources, and business characteristics between cooperatives and BUM Desa. In addition, Suadnyana & Sri Musmini (2022) emphasized that entities in the tourism sector are more vulnerable to financial stress due to external factors, while BUM Desa with a local needs-based business orientation tend to have better resilience to economic shocks. Furthermore, the findings of Indriani et al. (2023) that many property companies are in distress despite having large assets supports the results obtained in BUM Desa BSUT, where the very low S-Score value is not proportional to the amount of assets owned. This condition indicates that asset accumulation does not guarantee financial health if it is not accompanied by efficiency of use and ability to generate income. Conceptually, this finding

affirms the view of Gitman (1994) in Alverina & Hadiprajitno (2022) that the main factor causing financial distress is not only limited capital or market access, but mismanagement. Therefore, policy interventions and coaching should focus on improving managerial capacity and strengthening the supervisory system for BUM Desa operations.

The findings in this study can also be reviewed through relevant theoretical approaches. Conceptually, Signalling Theory explains that financial statements act as a means of conveying signals regarding business conditions and prospects to stakeholders. A high S-Score value reflects healthy financial ratios, which in turn provides a positive signal regarding the BUM Desa's managerial capability and growth prospects. Such signals have the potential to increase trust from external parties such as the village government, financial institutions, and the community, and open up wider funding opportunities. In addition, this finding is also relevant when examined through the Agency Theory perspective, which views the relationship between the principal (community and village government) and the agent (BUM Desa management) as a basis for evaluating performance. When the board succeeds in producing healthy financial performance, the agent function is carried out effectively. Conversely, the low S-Score value of BUM Desa such as BSUT indicates a potential agency problem, which requires improved oversight and accountability mechanisms. The difference in S-Score values between BUM Desa also shows that successful management does not only depend on the amount of capital, but is also determined by the suitability of local potential, type of business, human resource competencies, and institutional support. Thus, a *one-size-fits-all* approach to BUM Desa management is not appropriate, and development strategies should be tailored to the characteristics and needs of each village.

CONCLUSION

Based on the results of research on six active BUM Desa in Gorontalo Regency during the 2019-2023 period, it is concluded that in general BUM Desa did not experience financial distress, as evidenced by the majority of S-Score values above the 0.862 threshold. Only one BUM Desa was consistently in the unhealthy category, which does not adequately represent the overall condition. This indicates that most BUM Desa have the ability to maintain financial stability, manage assets productively, and run businesses sustainably, supported by relatively effective governance as well as contributions from capital participation and Village Government supervision. However, this study has limitations such as a small sample size, the use of purely financial

indicators, and a five-year time coverage that does not reflect long-term dynamics. Therefore, it is recommended that the Village Government be more selective in channeling capital participation based on business feasibility studies and conduct regular financial evaluations, while BUM Desa managers need to improve financial management, prepare complete and transparent financial reports, and attend business management training. For future research, it is recommended to use more samples, a longer period of analysis, and consider non-financial aspects and compare various prediction models such as Zmijewski or Grover to strengthen the accuracy of the analysis results.

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