

Analysis of School Budget Control Based on the Break-Even Point Approach to Minimize Operational Deficits

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Abstrak

Penelitian ini dilatarbelakangi oleh tingginya risiko defisit operasional dan kendala likuiditas bulanan di MTs Bodronoyo Jiwan Madiun. Masalah utama bersumber dari ketidakpastian dan fluktuasi pembayaran biaya pendidikan siswa setiap bulannya, yang diperparah oleh keterlambatan pencairan dana Bantuan Operasional Sekolah (BOS). Kondisi keuangan ini semakin terganggu oleh penerapan sistem pengendalian anggaran yang sangat konvensional tanpa adanya pemetaan struktur biaya yang akurat. Penelitian ini bertujuan untuk mendeskripsikan mekanisme identifikasi pemisahan biaya tetap dan variabel, menganalisis dampak nyata fluktuasi pendapatan biaya pendidikan terhadap arus kas, serta merumuskan formula Break Even Point (BEP) sebagai instrumen pengendalian preventif. Metode penelitian yang digunakan adalah deskriptif kualitatif. Pengumpulan data dilakukan melalui pendekatan triangulasi, yang mencakup wawancara mendalam, observasi langsung, dan analisis dokumentasi terhadap laporan arus kas serta Rencana Kegiatan dan Anggaran Madrasah (RKAM). Hasil penelitian menunjukkan bahwa biaya tetap madrasah mencapai Rp10.000.000 per bulan, sedangkan biaya variabel sebesar Rp4.000.000 per bulan. Dengan total pendapatan gabungan riil sebesar Rp32.250.000 per bulan, perhitungan margin kontribusi adalah sebesar Rp483.000 per siswa. Berdasarkan formula BEP, titik impas (break-even point) operasional berada pada ambang batas 21 siswa per kelas. Perhitungan ini berfungsi sebagai instrumen ambang batas dan pedoman manajerial bagi kepala madrasah dalam upaya menekan biaya variabel demi menjaga stabilitas arus kas.

Kata Kunci: Titik Impas, Pengendalian Anggaran, Likuiditas, Biaya Operasional, Manajemen Keuangan

Abstract

This research is motivated by the high risk of operational deficits and monthly liquidity constraints at MTs Bodronoyo Jiwan Madiun. The main problem stems from the uncertainty and fluctuations

in monthly student tuition payments, exacerbated by delays in the disbursement of School Operational Assistance (BOS) funds. This financial situation is further compromised by the implementation of a very conventional budget control system without accurate mapping of the cost structure. This research aims to describe the mechanism for identifying the separation of fixed and variable costs, analyze the actual impact of fluctuations in tuition revenue on cash flow, and formulate a Break Even Point (BEP) formula as a preventive control instrument. The research method used is descriptive qualitative. Data collection was conducted through a triangulation approach, which included in-depth interviews, direct observation, and documentation analysis of cash flow statements and the School Operational Assistance (RKAM). The results revealed that the madrasah's fixed costs reached Rp10,000,000 per month, while variable costs amounted to Rp4,000,000 per month. By achieving a total real combined income of Rp32,250,000 per month, the contribution margin calculation is Rp483,000 per student. Based on the BEP formula, the operational break-even point is at the threshold of 21 students per class. This calculation serves as a threshold instrument and managerial guideline for madrasah principals in reducing variable expenses to maintain cash stability.

Keywords *Break-Even Point, Budget Control, Liquidity, Operational Costs, Financial Management.*

A. INTRODUCTION

Budget management and control in educational institutions are key factors in maintaining operational sustainability and school financial balance. Accountable, transparent, and efficient financial management has been proven to create a school climate conducive to improving educational quality. However, weak budget planning and control in many educational institutions still frequently lead to problems such as late reporting, misallocation of funds, and difficulties in maintaining liquidity stability. MTs Bodronoyo Jiwan Madiun is a formal Islamic junior high school (Madrasah Tsanawiyah) educational institution in Madiun Regency that relies on two main revenue components: School Operational Assistance (BOS) funds from the government and Educational Development Contributions (SPP/Syahriah) funds from students. Although BOS funds flow smoothly, a fundamental challenge arises from fluctuations in monthly tuition payments. Student tuition payment patterns vary widely: some students pay directly for several months in advance, some pay on time every month, and others often fall behind for several months. This fluctuation creates an imbalance between realized monthly revenue and the madrasah's routine operational expenses. This situation has the potential to create an operational budget deficit

at the end of the month. This problem is exacerbated by the madrasah's conventional and manual budget control system, which prevents management from accurately separating financing components into fixed and variable costs. Therefore, a scientific approach based on the Break Even Point (BEP) is needed to determine the operational break-even point and safety threshold as a preventive financial control instrument. This research focuses on analyzing budget control mechanisms using the Break Even Point (BEP) approach to minimize the risk of operational deficits. The research questions are as follows:

1. What is the mechanism for identifying and classifying fixed and variable costs at MTs Bodronoyo Jiwan Madiun?
2. What is the impact of fluctuations in tuition fees/Syahriah revenues and BOS disbursements on the stability of the madrasah's cash flow?
3. What is the formula and application of Break Even Point (BEP) analysis as a preventative budget control tool to minimize operational deficits at MTs Bodronoyo Jiwan Madiun?

Research Objectives

1. Describe the mapping and separation of the fixed and variable cost structures of madrasah operations.
2. Analyze the sensitivity of cash flow to fluctuations in student tuition payment patterns.
3. Formulate the operational break-even point (BEP unit/rupee) as a managerial threshold in controlling school expenditures.

Literature Review

School Budget Control

Budget control is a systematic process to ensure that a school's actual expenditures do not deviate from the established budget plan (RAPBS/RKAM). Budget control acts as an operational compass that guides the effectiveness of an organization's performance through transparency and accountability in fund disbursement.

The Concept of Break Even Point (BEP) in Educational Units

Break-Even Point (BEP) is the condition where total revenue equals total costs, so the organization is neither generating a surplus nor experiencing a deficit (profit/loss = 0). In educational institutions, BEP analysis is adjusted by grouping costs into:

- a. Fixed Costs: Costs whose total amount remains constant and is not directly affected by the number of students, such as basic teacher/staff salaries, routine building maintenance, and basic electricity/water costs.
- b. Variable Costs: Costs whose total amount changes proportionally according to the number of students or the volume of learning activities, such as teaching materials/textbooks, student stationery, and extracurricular activities.

The BEP calculation formula used by Garrison, Noreen, & Brewer (2014):

$$BEP_{Number\ of\ Student} = \frac{Fixed\ Costs}{Contribution\ Margin\ Of\ Student}$$

Where Contribution Margin per Student is calculated from Average Revenue per Student minus Variable Costs per Student

B. METHOD

This research uses a descriptive qualitative approach. This approach was chosen to allow researchers to explore in-depth real-world data on financial records, tuition payment dynamics, and operational spending behavior at the study site. The research was conducted at MTs Bodronoyo Jiwan, Madiun Regency. Subjects and informants included the Madrasah Principal, the School Treasurer, the RKAM (Vocational School Work Plan) Drafting Team, and representatives from the School Committee. Teknik Pengumpulan Data Data was collected through three main techniques (triangulation):

1. In-depth interviews: Conducted with madrasah financial managers regarding the budgeting process and cash flow constraints.
2. Observation: Directly observing monthly cash transaction recording procedures and budget management.

3. Documentation: Analyzing Madrasah Work Plan and Budget (RKAM) documents, summaries of SPP/Syahriah receipts, BOS disbursement reports, and general cash ledger details.

The data analysis technique refers to the interactive model (Miles & Huberman) which includes four stages: data collection, data reduction, data presentation (through cost component classification and BEP mathematical formula), and drawing conclusions.

C. RESULTS AND DISCUSSIONS

Revenue Recapitulation and Cost Structure Identification

Based on the results of data mining and documentation of MTs Bodronoyo Jiwan Madiun's financial reports, the structure of monthly operational revenues and expenses was identified as follows:

1. Operational Income Components:

The combined monthly routine fund receipts from the School Operational Assistance (BOS) allocation and actual tuition fees (Syahriah) reached an average of IDR 32,250,000 per month.

2. Operational Cost Structure Classification:

- a. Fixed Costs: Consisting of teacher/non-ASN employee salaries, fixed allowances, maintenance of basic facilities and infrastructure, and electricity/service subscriptions. Total Fixed Costs are set at IDR 10,000,000 per month.

- b. Variable Costs: Consisting of operational costs for teaching and learning activities (KBM), consumption, module duplication, and daily stationery. Total Variable Costs are IDR 4,000,000 per month.

3. Contribution Margin

Based on the calculation of the ratio of expenditure to the number of actively contributing students, the Contribution Margin is Rp483,000 per student. Analisis Break Even Point (BEP) dan Batas Aman (Threshold) Using the BEP calculation formula based on contribution margin, the operational break-even point of the madrasah is calculated as follows:

$$\text{BEP}_{\text{Student Unit}} = \frac{\text{Rp.10.000.000}}{\text{Rp.483.000}} = 20,7 \text{ Student}$$

From a managerial perspective, this result is rounded up to 21 students per class. This figure serves as the threshold (minimum safe limit). This means that if the number of students in a class who pay their tuition fees on time falls below 21, the madrasah is at risk of a cash deficit.

Strategic Implications of Budget Control

The results of this Break Even Point (BEP) analysis provide practical implications for the management of MTs Bodronoyo Jiwan Madiun:

1. Preventive Control Function: The Principal and Treasurer can use the BEP value (21 students/class) as an early warning system. If by the first week of the month, tuition payments have not reached the 21-student quota per class, the principal can immediately reduce expenditures on variable costs (such as postponing non-urgent stationery purchases or restructuring the activity budget).
2. Mitigating BOS Delays: When BOS fund disbursements are delayed by the government, the BEP threshold helps the madrasah determine the amount of reserve funds to hold to ensure that core operations (fixed costs) are not disrupted.

D. CONCLUSIONS

The implementation of the Break Even Point (BEP) approach at MTs Bodronoyo Jiwan Madiun has proven effective in transforming the budget control system from a conventional model to a preventive control based on measurable data, thus minimizing the risk of monthly cash deficits due to late tuition fees. This effectiveness is supported by the stable monthly operating cost structure of the madrasah with Fixed Costs of Rp10,000,000, Variable Costs of Rp4,000,000, and an average total revenue of Rp32,250,000 per month. Based on the cost and revenue analysis, the BEP calculation shows that the operational break-even point of the madrasah is achieved at the level of 21 students per class with a contribution margin of Rp483,000 per student.

E. SUGGESTIONS

1. For Madrasah Principals: Use the Break Even Point (BEP) figure (21 students per class) as the official reference for approving the Madrasah Work Plan and Budget (RKAM) and the daily budget flexibility policy.
2. For Financial Managers/Treasurers: Digitize cash records to ensure the separation of fixed and variable costs can be monitored in real time.
3. For Future Researchers: Develop a BEP analysis model by integrating the school/madrasah's independent business diversification variable to strengthen the institution's financial independence.

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