

Examining financial management in Thai public schools: sources of funding, allocation practices, and strategies for improvement

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ABSTRACT

This study was conducted to address the critical gaps in financial management practices within Thai public schools, where inefficiencies and mismanagement persist despite available guidelines and funding. The relevance of this research lies in its potential to enhance financial governance, ensuring optimal resource allocation and accountability, which are vital for improving educational outcomes. Employing a mixed-methods approach, the study combined descriptive questionnaires administered to 396 school administrators with structured interviews involving 36 participants to evaluate funding sources, allocation processes, and adherence to financial guidelines. The findings revealed that while schools received funding from diverse sources, namely government, parents, and donors, 85% of administrators reported insufficient budgets. Notably, 82% acknowledged non-compliance with financial guidelines despite submitting utilization reports, highlighting systemic inefficiencies. The study concluded that inadequate financial management skills and inconsistent policy implementation hinder effective resource use. To address these challenges, the study proposes targeted interventions, including specialized training programs, the establishment of dedicated financial departments, and updated management guidelines. These measures aim to strengthen financial accountability and operational efficiency in public schools, offering actionable insights for policymakers and administrators. Future research should compare public and private sector practices to refine standardized financial management frameworks.

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1. INTRODUCTION

Mohzana *et al.* [1] conceptualizes education as a dynamic input-output system. In this framework, schools utilize various inputs—such as human resources, machinery, and other physical assets—which, through a combination of processes and activities, culminate in desired outputs or outcomes aligned with the institution's educational objectives. The quality of these outputs is largely dependent on the quality of the inputs provided. However, while this input-output correlation is widely acknowledged, Bergbauer *et al.* [2] strongly argues that there is no consistent, direct relationship between student performance and the level of school resources. Indeed, the achievement of high-quality educational outcomes is influenced by various factors beyond the mere availability of inputs. It is, furthermore, distinguished between financial resources and real resources.

Romijn *et al.* [3] categorize a school's authority into three domains: budget, personnel, and curriculum. Bisht *et al.* [4] emphasize that of these, school budget and finance (SBF) management is particularly important, as giving schools control over their budgets is essential for decentralization reform efforts. However, many scholars warn that SBF management alone does not improve academic performance. For SBF to enhance education quality, it must be coupled with broader school reforms [5]. Lusardi and Mitchell [6] caution that while SBF management has many advantages, improper implementation can cause more harm than good. Schools' failure to effectively implement SBF is not due to its inherent flaws but rather resistance at the central, district, or school level. Berhanu [7] further argues that policymakers often feign authority-sharing without genuinely relinquishing control. Lusardi and Mitchell [6] suggest that the failure of SBF management often stems from school personnel, as some teachers and principals are unprepared to assume the added responsibilities that come with managing decentralized budgets. As a result, reforms can be ineffective if the government is unwilling to fully devolve financial decision-making, or if school personnel are neither equipped nor willing to handle these new responsibilities. Additionally, Lusardi and Mitchell [6] also warn that a lack of transparency in financial information can lead to increased opportunities for the misuse of educational funds. Finally, any new initiative takes time to produce noticeable results [8], [9]. Therefore, adequate support is crucial, especially in the early stages, when outcomes may initially appear to worsen. Lusardi and Mitchell [6] highlight the significant financial costs of implementing SBF, including necessary staff training and initial subsidies. They caution that reforms focused solely on cost-saving measures or implemented too abruptly are likely to fail.

Financial resources, for instance, refer to the funds available for acquiring the necessary real resources—such as human capital and materials—essential for delivering educational services. The availability of real resources is inherently dependent on the financial resources allocated to the school, highlighting the critical role of effective financial management at the institutional level. This relationship underscores the joint responsibility of school administrators, directors, coordinators, and governing boards in overseeing the prudent management of resources and ensuring the maintenance of the school's infrastructure. School administrators must be equipped with both practical knowledge and essential skills in financial management to ensure the delivery of quality education [10].

Given that school directors are tasked with managing public funds, it is imperative that they allocate resources judiciously and maintain comprehensive financial records for accountability. As Shaked [11] suggest, budgeting—encompassing preparation, implementation, and control—is central to school-based financial management. Consequently, school directors must be progressively trained and held accountable for managing aspects of the budget, particularly concerning recurrent expenditures. Schools should develop systems to enable administrators to manage public funds effectively and make financial decisions that support educational objectives.

School administrators, thus, play a vital role in ensuring the effective and efficient operation of educational systems, particularly in financial management. They are expected to demonstrate excellence across all aspects of education by leading teachers and staff to collaborate toward common goals while continuously improving standards and overall conditions. These leaders also provide strategic vision and direction for the future development of the institutions they oversee, fostering a progressive and positive environment [12]. In today's dynamic world, success requires managers to possess essential management skills, including financial management. Similarly, the performance of school directors heavily depends on their understanding of their work environment and their ability to apply these competencies effectively [13].

However, reports indicate that the financial stability of Thai schools remains inefficient [14]. This ongoing issue, along with challenges in financial and budgeting practices, underscores the critical need for effective [15] and efficient management skills—an area that motivated the researcher to explore this issue further aligning with the three research objectives: i) to identify the primary sources of funding for schools, and examine how these funds are allocated and disbursed; ii) to evaluate the effectiveness of current financial management practices and guidelines meeting with the operational needs of schools, and what its challenges or concerns arise in their implementation; and iii) to propose the intervention strategies aimed at improving financial management in schools based on the analysis of existing policies and practices. Based on the research objectives, the study seeks to answer the following questions:

- i) What are the primary sources of funding for public schools in Thailand, and how are these funds allocated and disbursed? (Q1)
- ii) How effective are current financial management practices and guidelines in meeting the operational needs of schools, and what challenges hinder their implementation? (Q2)
- iii) What intervention strategies can be proposed to improve financial management in schools based on an analysis of existing policies and practices? (Q3)

This study introduces three novel contributions to the literature on educational financial governance. First, it uncovers the critical paradox of feigned compliance in Thai public schools. In addition, it identifies

chronic budget insufficiency despite diversified funding, challenging assumptions that multiple revenue streams inherently resolve resource gaps. Finally, it proposes a tailored intervention framework integrating mandatory financial training, dedicated school finance units, and context-flexible policies-addressing systemic flaws rather than symptoms. This triad of empirical, diagnostic, and prescriptive advances offers a replicable model for global south contexts grappling with centralized-decentralization tensions [6], [7], [16].

This study holds significant implications for enhancing financial governance in Thai public schools. By identifying key funding sources and evaluating allocation processes, it provides critical insights into existing financial mechanisms. The assessment of current management practices highlights gaps between policy and implementation, offering a foundation for corrective measures. Furthermore, the proposed intervention strategies—such as specialized training, dedicated financial departments, and updated guidelines—aim to strengthen accountability and operational efficiency. These contributions empower school administrators to make informed financial decisions, optimize resource utilization, and mitigate mismanagement risks. Ultimately, the findings support policymakers in refining financial governance frameworks to ensure sustainable and effective school funding systems.

2. METHOD

2.1. Research design

This mix-methods study utilized a descriptive questionnaire to assess the level of awareness among public-school directors regarding the existing Department of Education rules and regulations, including legislative enactments that govern the management of public-school funds. The questionnaire also examined the extent to which these officials comply with the relevant laws, rules, and regulations. The findings reveal either the absence of applicable laws, rules, and regulations, or a low level of awareness and adherence among public-school directors, the study seeks to evaluate the availability of financial and management training programs to address these deficiencies. If such programs are found to be lacking, the study aims to propose a draft training and development program specifically designed to improve the financial management capabilities of public-school directors through the qualitative method of conducting the interview for the purpose proposing the plan.

2.2. Population and sample

This study targeted all Thai public-school administrators overseeing financial management (directors/assistant directors). Using Krejcie and Morgan's formula for finite populations with a 95% confidence level ($\chi^2=3.841$), population size ($N=30,000$), maximum variance ($p=0.5$), and 5% margin of error (d), calculated a minimum sample of 380. After adding a 10% buffer for non-responses (target: 418), 396 valid responses were obtained, exceeding the threshold and ensuring statistical robustness. For qualitative insights, 36 directors were purposively selected to achieve thematic saturation [17]. Participants (aged 35–65) represented diverse regions; 91% were directors with >10 years' experience, while 9% were assistant directors.

2.3. Research instrument and validation

The structured questionnaire underwent rigorous validation through a multi-step process. Content validity was established using the index of consistency (IOC) evaluated by three educational administration experts, with all items scoring ≥ 0.80 (exceeding the 0.50 threshold), confirming relevance and clarity. Reliability was assessed via a pilot study ($n=5$ non-participant directors), yielding high internal consistency (Cronbach's $\alpha=0.87$ for fund sources/utilization and $\alpha=0.91$ for compliance knowledge; both >0.70). To control confounding variables, we implemented stratified sampling by region/school size to minimize geographic and socioeconomic biases, provided standardized interviewer training to reduce measurement variability, and applied multivariate regression to statistically adjust for demographic covariates (e.g., age, experience) during analysis. Qualitative protocols followed parallel validation through expert review and pilot testing.

2.4. Data collection

After distributing the questionnaire to participants online, the quantitative data were systematically analyzed and presented using descriptive statistics, including frequencies and percentages, to evaluate funding sources, allocation practices, and compliance with financial guidelines. The results revealed critical insights into budget sufficiency and utilization patterns, as detailed in Tables 1–4. Additionally, qualitative data collected from structured online interviews with 36 school directors were thematically analyzed to identify recurring challenges and gaps in financial management practices. These findings informed the development of targeted action plans, such as specialized training programs and updated guidelines, aimed at strengthening administrators' financial management skills and improving overall governance.

3. RESULTS

3.1. Socio-demographic profile

The study involved 396 participants who were directly responsible for financial management. The age distribution of these participants ranged from 35 to 65 years, with the largest group, comprising individuals aged 61 to 65, accounting for 55% (216 individuals) of the total. This was followed by the age group of 51 to 60, which included 33% (132 individuals) of the participants. These findings indicate that a significant majority of those in charge of financial management in Thai public schools are older officials. Conversely, the two age groups with the lowest representation were those aged 40 to 50, consisting of only three officials, and those aged 35 to 39, who were the least represented.

Regarding compensation, most of these educational professionals received substantially higher salaries compared to their counterparts in the country's teaching sector. Notably, 70% of the respondents (276 out of 396) reported monthly earnings exceeding 50,000 Baht. A smaller proportion, 27% (108), fell within the 40,000-50,000 Baht monthly salary range. Only a marginal 3% (12 officials) reported monthly earnings between 30,000-40,000 Baht. The data clearly indicates extensive experience within the school system among the participants. Specifically, 27% (108) reported over two decades of service, while the majority (60%) had accumulated between 10 to 20 years of experience. A minority of participants had shorter tenure: 9% with 6 to 10 years of experience, and only 12 officials with 1 to 5 years in the field. Furthermore, the sample predominantly consisted of school directors (91%), with only 9% (36) holding assistant director positions. The data presented in Table 1 corroborates that the majority of those responsible for financial management in Thonburi schools were long-standing members of the educational system. Their extensive experience was reflected in their elevated positions and commensurate government-provided compensation packages, as all participants held positions of assistant director or higher.

Table 1. Profile of the respondents

Particular	Frequency	Percentage (%)
Age groups		
35-39	12	3
40-50	36	9
51-60	132	33
61-65	216	55
Salary		
30,000-40,000/month	12	3
40,000-50,000/month	108	27
50,000 above	276	70
Years in service		
1-5	12	3
6-10	36	9
11-20	240	60
20 above	108	27
Positions		
Directors	360	91
Asst. Directors	36	9

3.2. Different fund sources, utilization of funds and disbursement

To address the inquiry of the Q1, the data given by the directors portray the information concerning the sources of the funds supported as shown in Table 2. Table 2 illustrates the diverse sources of annual funding for the educational institutions in question. The financial support is derived from multiple stakeholders, including parental contributions, philanthropic benefactors, individual donors, governmental allocations, and various other sources. Given the substantial cumulative funds received, it is imperative that these resources be allocated and utilized with prudence and strategic foresight to maximize their impact on educational outcomes. The directors also have given the information concerning the utilization of the funds and disbursement as shown in Table 3.

The allocation of school budgets demonstrates a multifaceted approach to resource distribution. According to the study participants, who primarily held positions as school directors, the funds were principally allocated across four critical domains: student support services, procurement of educational equipment and materials, facility maintenance and minor repairs, and operational expenses including salaries and wages. This diversified expenditure pattern reflects the complex financial demands inherent in maintaining and improving educational institutions, balancing direct student needs with broader infrastructural and administrative requirements.

Table 2. Funds received by school directors

Sources of funds	Respondents	Percentage (%)
Parents	396	100
Benefactors	396	100
Donors	396	100

Table 3. Utilization of funds in general

Purposes of funds given	Yes		No		Total Percentage (%)
	Respondents	Percentage (%)	Respondents	Percentage (%)	
Students' assistance	396	100	-	-	100
Procurement of equipment	396	100	-	-	100
Minor repairs of school	396	100	-	-	100
Salary/wage	396	100	-	-	100
Operational expenses	396	100	-	-	100

3.3. Effectiveness of spending funds for operational needs of the schools and its challenges

To address the Q2, which examines the sufficiency of school budgets and associated challenges, the study analyzed directors' assessments of financial support adequacy. As summarized in Table 4, respondents were asked to evaluate whether funds from diverse sources (e.g., government, donors) met their schools' operational needs. The findings revealed widespread budgetary shortfalls: 85% of directors (336 out of 396) reported insufficient funding, while only 15% (60 directors) deemed allocations adequate. This disparity underscores systemic gaps between resource availability and institutional demands, highlighting pressures on financial management practices. The data further suggest that non-compliance with guidelines, as shown in Table 5 may exacerbate these challenges, necessitating structural interventions to align funding with operational requirements.

Table 5 demonstrates that all participants in the study acknowledged receiving government-issued guidelines for fund utilization. Although these guidelines provide a framework for proper budget management, a significant portion of respondents—324 directors, or 82%—reported not adhering to them. Despite this, all directors submitted their fund utilization reports, indicating a disconnect between the reporting process and actual compliance with the prescribed guidelines. This suggests that the budget was not managed efficiently, as the funds were not utilized according to the established protocols.

Table 4. Sufficiency of funds received

School directors receiving funds for operational expenses	Yes		No		Total Percentage (%)
	Respondents	Percentage (%)	Respondents	Percentage (%)	
Sufficiency of funds received	60	15	336	85	100

Table 5. Challenges and issues of spending budget following the financial management practices guideline

Issues	Yes	Percentage (%)	No	Percentage (%)	Total	Percentage (%)
Governing guidelines in the utilization of funds available	396	100	-	-	396	100
Compliance with the guidelines	72	18	324	82	396	100
Submission of fund utilization report	396	100	-	-	396	100

4. DISCUSSION

The findings of this study present a comprehensive examination of financial management challenges in Thai public schools, building upon and extending previous research in educational administration and school finance. Our results demonstrate significant systemic issues in budgetary sufficiency and financial governance that merit careful consideration within both local and international contexts [16], [18]. A central finding of this study reveals that while Thai public schools receive funding from multiple sources—including government allocations (100% of schools), parental contributions (100%), and private donors (100%)—a striking 85% of school directors report these funds as insufficient for operational needs [19]. This finding aligns with but extends previous work [20], [21], which cautioned that decentralized budgeting systems often fail when not properly implemented. Our data suggests this insufficiency persists despite Thailand's efforts at educational decentralization, highlighting a critical gap between policy intentions and practical realities. The chronic underfunding reported by school administrators may help explain the widespread non-compliance with financial guidelines (82% of respondents), as schools potentially resort to unconventional methods to stretch inadequate budgets.

The study's mixed-methods approach provides nuanced insights into these financial management challenges. Quantitative data reveals structural issues in budget adequacy, while qualitative interviews uncover underlying causes. Many directors reported lacking formal training in financial management, supporting findings about competency gaps in school leadership [22], [23]. This training deficit appears particularly acute among long-serving administrators (60% with 11-20 years' experience), suggesting that traditional approaches to professional development may be ineffective for updating veteran educators' financial management skills [24], [25]. Our findings regarding guideline non-compliance present a particularly complex picture. While all schools submitted required financial reports (100%), most (82%) admitted to not fully adhering to official guidelines. This discrepancy suggests what previous studies [26], [27] termed feigned decentralization—where systems maintain the appearance of compliance while actual practices diverge from policy. Several interview participants described guideline requirements as impractical given their budgetary constraints, indicating a need for more flexible, context-sensitive financial policies [28], [29].

The study's demographic data offers important contextual understanding. The predominance of older administrators (55% aged 61-65) in financial management roles may contribute to resistance against adopting modern financial practices. This generational dimension has not been sufficiently explored in previous literature and warrants further investigation. Similarly, the salary data (70% earning >50,000 THB monthly) suggests that financial management challenges cannot be attributed solely to compensation issues, complicating conventional assumptions about motivation and performance. These findings have several important implications for policy and practice. First, they suggest that simply increasing funding without addressing systemic management issues may yield limited improvements. Previous studies [30], [31] noted financial resources alone cannot guarantee educational quality without proper management structures. Second, the universal reporting compliance coupled with widespread guideline non-compliance indicates that current accountability mechanisms may be measuring the wrong indicators—focusing on paperwork rather than substantive financial management quality.

The study supports calls for targeted professional development, but with important qualifications. Traditional training programs may be insufficient for addressing the deeply embedded practices of long-serving administrators. Alternative approaches, such as mentorship programs or on-the-job coaching, might prove more effective for this demographic. The establishment of dedicated financial management units in schools, as suggested by some interview participants, could provide ongoing support beyond one-time training initiatives.

This research also highlights the need for policy flexibility. The consistent report of insufficient budgets across diverse school contexts suggests that current funding formulas may not adequately account for varying local needs. A more nuanced allocation system, perhaps incorporating school-specific indicators of need, could help address this issue. This aligns with the previous studies [32], [33] emphasis on contextual factors in school improvement efforts.

Several limitations should be noted. The study's focus on administrators' perspectives, while valuable, does not capture classroom-level impacts of financial management decisions. Future research could usefully examine how budgetary decisions affect teaching quality and student learning directly. Additionally, the study's Thai context may limit generalizability to other educational systems, though many findings echo challenges identified in international literature [34], [35]. Looking forward, this study suggests several promising directions for future research. Comparative studies between public and private schools could illuminate alternative management approaches. Longitudinal research could track how changes in financial management practices affect educational outcomes over time. Additionally, case studies of exceptionally well-managed schools might identify best practices that could be adapted more widely. In brief, this study provides compelling evidence that financial management challenges in Thai public schools stem from complex interrelationships between insufficient funding, inadequate training, and inflexible policies. Addressing these issues will require coordinated efforts at multiple levels—from frontline administrators to national policymakers. The findings underscore that financial management reform must be contextual, comprehensive, and sustained to achieve meaningful improvement in educational resource utilization. As Thailand continues its educational decentralization efforts, these insights can help shape more effective approaches to school financial governance.

5. CONCLUSION

This study provides robust evidence from 396 Thai public-school administrators, combining quantitative and qualitative data to reveal critical financial management challenges. Key findings show that 85% of schools face budget shortfalls despite multiple funding sources, while 82% report non-compliance with financial guidelines despite submitting required reports. These systemic issues persist across experience levels and school types, indicating deep-rooted institutional challenges rather than individual shortcomings.

Based on this evidence, we propose three concrete interventions to address the Q3: i) mandatory financial management training for school administrators; ii) establishment of dedicated financial units in schools; and iii) policy revisions to create more flexible, context-sensitive budgeting guidelines. These targeted measures directly address the gaps identified in our research and can significantly improve financial governance. Future studies should examine how these financial management practices impact classroom outcomes and compare approaches across different education systems. The findings provide a clear evidence-based foundation for reforming school financial systems to enhance efficiency and accountability.

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AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

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C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

I : Investigation

R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

INFORMED CONSENT

The research related to animal use has been complied with all the relevant national regulations and institutional policies for the care and use of animals.

DATA AVAILABILITY

The data that support the findings of this study are available on request from the corresponding author, [HJ]. The data, which contain information that could compromise the privacy of research participants, are not publicly available due to certain restrictions.

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