

Educational Financing Management and Diversification: A Comparative Study in West Java Primary Schools

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Abstract

This study addresses the limited evidence on the diversification of primary school financing and regionally differentiated management mechanisms, despite their importance for school financial sustainability and educational quality. It aims to analyze the structure of educational financing sources, evaluate School Activity and Budget Plan (RKAS)-based management mechanisms, and examine managerial constraints across three socio-demographically distinct contexts. A qualitative design was employed at three purposively selected primary schools: SDN 113 Cijawura in Bandung City, SDN Cimalaka III in Sumedang Regency, and SDN Cileunyi 01 in Bandung Regency. Data were collected through in-depth interviews, observations, and document analysis of RKAS documents and financial reports and were examined using interactive qualitative analysis. The findings show that government School Operational Assistance (BOS) funds constitute the dominant financing source, accounting for 80%–90% of school funding. However, diversification capacity differs across regional contexts: urban schools leverage corporate partnerships, suburban schools utilize cooperative enterprises, and rural or regency schools rely primarily on community support. These context-specific patterns are consistent with the principles of school-based management. The findings further indicate that heavy dependence on government funding increases financial vulnerability, underscoring the importance of funding diversification and stronger managerial capacity. This study extends the literature on financial resilience in primary education and provides practical grounds for local education authorities to

reform school fundraising regulations and strengthen technology-based financial management training for school administrators. Future quantitative research should examine the direct effects of financing diversification on student learning outcomes.

Keywords: Educational Financing; Financial Resilience; Funding Diversification; Primary Education; School-Based Management

INTRODUCTION

Educational financing serves as an indispensable foundation for the operational sustainability and institutional quality of primary education institutions across the globe. Internationally, public primary schools in developing economies frequently grapple with structural budget deficits, high reliance on central government subsidies, and systemic vulnerabilities to fiscal policy fluctuations (Aktaş & Can, 2021; Flores et al., 2024). When primary schools become passive recipients of state budgets rather than active managers of diverse financial resources, any administrative delay in public funding immediately paralyzes daily learning activities and halts essential infrastructure maintenance. In the Indonesian context, state primary schools rely predominantly on School Operational Assistance (BOS) funds as their primary instrumental input (Hidayat et al., 2026b; Nunung et al., 2023; Putra et al., 2023). However, Celestin et al. (2024) state that this extreme state-dependency poses severe risks to financial stability, particularly when schools face rigid technical guidelines, delayed fund disbursements, and restrictive budget reallocations. Without strategic financial management, educational institutions struggle to maintain learning effectiveness and upgrade physical facilities in response to modern educational demands.

To address these critical financing issues, researchers argue that primary schools must shift from single-source reliance toward sustainable financial management and funding diversification. Hakim et al., (2026), Presiden et al. (2026), and Silvana et al. (2026) emphasize that educational financing should not merely be viewed as an administrative accounting routine, but as a strategic instrumental input that dictates overall school productivity and human resource development. Implementing strategic funding diversification, such as fostering community participation (Margareth et al., 2026; Mursidah & Nadhir, 2025), establishing corporate social responsibility partnerships (Bandurka, 2026; Kovalenko et al., 2025), and developing school-based entrepreneurial units (Arisanti et al., 2025; Arvidsson,

2026), enables educational institutions to build financial resilience against external policy shocks. Furthermore, Rahma et al. (2026) and Wahyuni et al. (2025) stated that integrating structured financial planning through the School Activity and Budget Plan (RKAS) allows school leaders to allocate resources more transparently, accountably, and in alignment with institutional priorities.

Prior empirical studies have explored various dimensions of educational financing and school sustainability. For instance, Kholik et al. (2026) examined the financing of educational facilities, demonstrating that integrating government grants with parental contributions through school committees significantly enhances facility development. In a broader regional context, Kurniawati et al. (2026) highlighted that sustainable primary education financing requires multi-stakeholder synergy between local authorities, communities, and school management. Additionally, Yakin et al. (2026) explored financial independence within religious educational institutions through social entrepreneurship models. Despite these valuable contributions, a distinct empirical gap remains: prior literature heavily focuses either on single-site institutions or macro-level policy reviews, while failing to provide comparative cross-regional analysis on how primary schools in distinct socio-demographic settings, such as urban centers, suburban zones, and developing regencies, manage and diversify their educational financing.

The current study addresses this research gap by utilizing School-Based Management (SBM) theory by Macawile & Lombrio (2026) and financial diversification frameworks as foundational analytical perspectives. Derived from primary sources and empirical literature, SBM theory posits that granting autonomy to local school units enhances resource allocation efficiency, financial transparency, and institutional adaptability (Perol, 2026). Comparing primary schools across contrasting administrative and socio-economic environments offers a novel conceptual framework for understanding how localized strategies mitigate financial vulnerability and institutional constraints. This comparative lens reveals whether urban schools enjoy structural advantages in corporate partnerships compared to suburban or regency schools, thereby advancing theoretical models of financial resilience in public primary education.

The main objective of this study is to examine and compare the management and diversification of educational financing across three primary schools located in distinct administrative regions: SDN 113 Cijawura in Bandung City, SDN Cileunyi 01 in Bandung

Regency, and SDN Cimalaka III in Sumedang Regency. Specifically, this research focuses on identifying the primary and alternative sources of funding, evaluating the execution of RKAS-based financial management mechanisms, and analyzing the internal and external constraints encountered by school administrators in sustaining educational quality.

METHODS

This research adopted a qualitative approach to systematically explore and gain an in-depth understanding of educational financing management and its challenges across different regional contexts. The selection of a qualitative approach is based on its suitability for investigating complex, naturalistic phenomena where researchers seek to understand the meaning individuals or groups ascribe to a specific social or human problem, as outlined by Braun & Clarke (2013) and Creswell & Guetterman (2019). Specifically, this study employed a comparative case study design by Rokoszewska (2026). This design is highly appropriate for answering the research questions because it allows for an intensive, contextual examination of how funding diversification and School Activity and Budget Plan (RKAS) management differ across urban, suburban, and regency settings. Compared to previous relevant studies, such as the single-site case study by Lobo et al. (2017) or the broad macro-policy survey by Persson (1988), this comparative design demonstrates distinct uniqueness by actively contrasting localized financial strategies and structural constraints across three socio-demographically diverse boundaries, thereby providing a more nuanced and practical framework for regional policy improvements.

The population for this study encompassed public primary schools within West Java Province, specifically targeting institutions that have initiated funding diversification beyond government subsidies. The sample was selected using a purposive sampling technique (Campbell et al., 2020; Makwana et al., 2023; Tajik et al., 2024). The criteria for selection required the schools to represent three distinct administrative and socio-economic characteristics (urban center, suburban zone, and developing regency) and to possess active School Committees. Based on these criteria, the sample size consisted of three specific cases: SDN 113 Cijawura representing Bandung City, SDN Cileunyi 01 representing Bandung Regency, and SDN Cimalaka III representing Sumedang Regency. The primary participants included the school principals, school treasurers, and school committee administrators from each site. Methodological justification for this approach aligns with Sugiyono (2019), who

states that purposive sampling is the most effective technique in qualitative research when the researcher requires participants who hold specific, specialized knowledge related to the research phenomenon.

Data collection was systematically conducted using three primary instruments: in-depth interviews by Minichiello et al. (2008), participant observations by Jorgensen (1989), and document analysis by Yin et al. (2025). Interviews were directed at school administrators to uncover the internal constraints of financial management, while document analysis focused heavily on the RKAS, financial accountability reports (LPJ), and School Operational Assistance (BOS) technical guidelines. To ensure the validity and reliability of the qualitative data (trustworthiness), the researcher employed source and technique triangulation, rigorously cross-verifying the interview transcripts against the financial documents and observational field notes. These data collection procedures closely mirror the instruments utilized in previous studies by Diantari et al. (2024) and Wenry (2024), who successfully combined stakeholder interviews with financial document reviews to measure institutional financial independence.

Finally, the collected data were processed and analyzed using the interactive thematic analysis technique (Ahmed et al., 2025; Zairul, 2025). Following the qualitative analysis guidelines proposed by Miles & Huberman, (1994), the analytical process involved three concurrent streams of activity: data condensation to filter essential financial constraints, data display using comparative matrices for the three schools, and conclusion drawing. To enhance the accuracy and systemic categorization of the thematic coding, NVivo 12 software was utilized to map out the financial dependency patterns and diversification strategies across the three distinct research sites. The application of NVivo 12 ensured rigorous data organization, facilitated theme identification, and enabled clear visual mapping of cross-case comparative patterns.

RESULTS

Primary Financing Sources and Diversification Profiles

The empirical data across the three research sites reveals that government funding through the School Operational Assistance (BOS) program remains the primary instrumental input for operational survival. However, significant variations exist regarding how each school diversifies its supplementary funding based on its regional and socio-demographic

setting. Table 1 summarizes the empirical allocation and funding diversification profiles across the three primary schools.

Table 1. Proportion of Educational Financing Sources Across Research Sites

Financing Source Category	SDN 113 Cijawura (Bandung City)	SDN Cileunyi 01 (Bandung Regency)	SDN Cimalaka III (Sumedang Regency)
Government Allocation (BOS)	81.5%	88.2%	91.4%
School Committee & Parents	11.0%	6.5%	7.2%
Corporate / DUDI CSR Partnerships	5.0%	1.8%	0.0%
School-Based Enterprises	2.5%	3.5%	1.4%
Total	100.0%	100.0%	100.0%

As shown in Table 1, SDN 113 Cijawura in urban Bandung City demonstrates the highest capacity for funding diversification, securing 5.0% of its budget through corporate partnerships with local businesses and 11.0% via voluntary parent contributions through the School Committee. In contrast, SDN Cimalaka III in Sumedang Regency relies overwhelmingly on government BOS funds (91.4%).

To calculate the Financial Vulnerability Index (FVI) resulting from state-dependency, the following equation was applied to each school's budget structure:

$$FVI = \frac{S_{gov}}{S_{total}} \times 100$$

Where S_{gov} represents total government funding and S_{total} represents total annual school expenditure. A higher FVI value indicates greater institutional vulnerability to external funding delays. Based on equation (1), SDN Cimalaka III exhibits the highest financial vulnerability ($FVI = 91.4$), followed by SDN Cileunyi 01 ($FVI = 88.2$), and SDN 113 Cijawura ($FVI = 81.5$).

RKAS Management Mechanisms and Financial Transparency

The management of educational financing in all three institutions is guided by the School Activity and Budget Plan (RKAS). Figure 1 illustrates the standardized RKAS workflow implemented across the sites, from multi-stakeholder needs assessment to digital reporting.

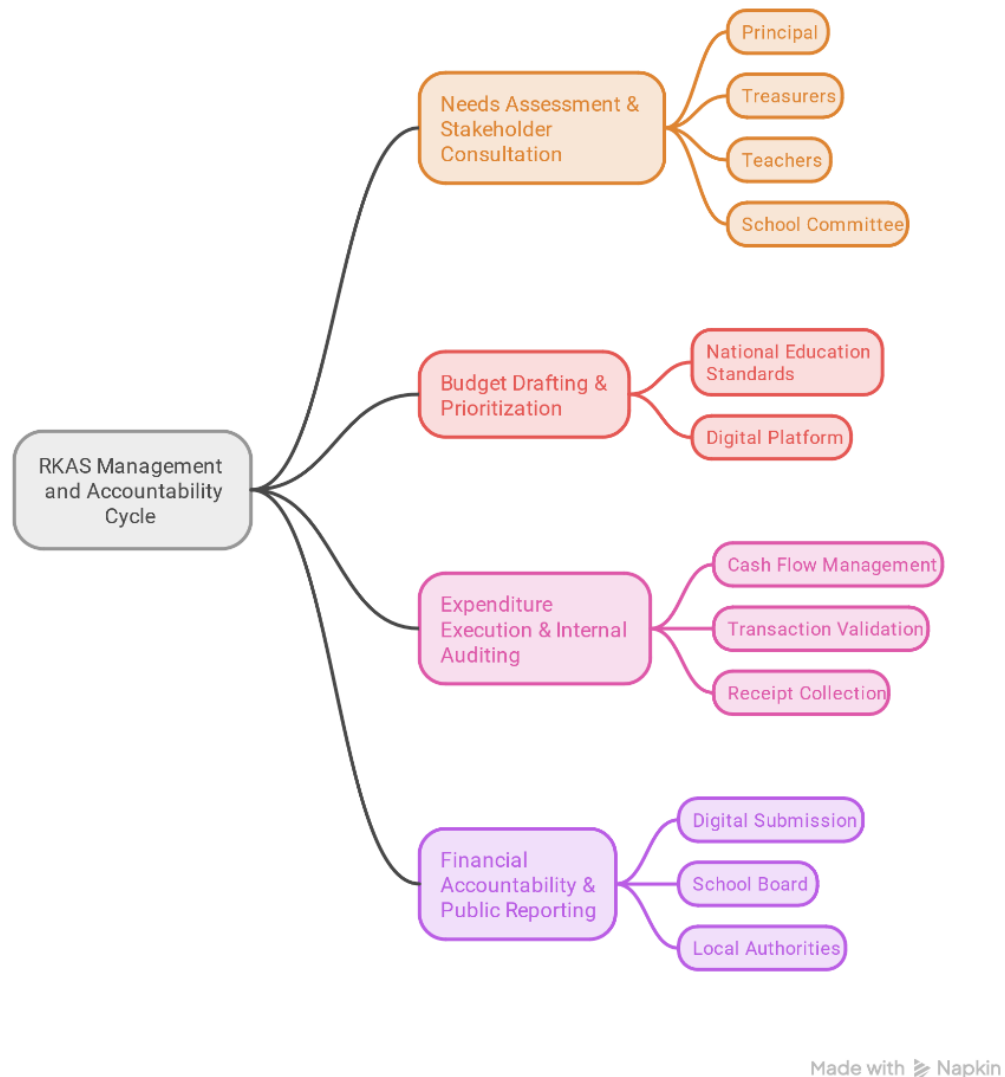


Figure 1. Standardized RKAS Management and Accountability Cycle

Figure 1 outlines how financial planning is operationalized through the government-mandated ARKAS application. While the planning stage involves school committee input, actual budget execution is heavily constrained by strict technical guidelines (Juknis). An interview with the school treasurer at SDN Cileunyi 01 highlights these operational rigidities:

"We design the RKAS based on urgent school needs, such as repairing leaky roofs or upgrading instructional media. However, because BOS guidelines strictly regulate percentage allocations for specific line items, we frequently have to adjust our real priorities to fit the rigid system formulas. When BOS disbursement is delayed for two months, we are forced to rely on personal loans from school staff or credit from local vendors to keep daily operations running." (Informant BS2, School Treasurer, SDN Cileunyi 01).

Internal and External Management Constraints

The empirical findings identify two primary categories of constraints in financial management: internal human resource limitations and external regulatory dynamics. Table 2 presents the comparative matrix of identified constraints across the three locations.

Table 2. Comparative Matrix of Internal and External Financial Management Constraints

Constraint Category	SDN 113 Cijawura (Bandung City)	SDN Cileunyi 01 (Bandung Regency)	SDN Cimalaka III (Sumedang Regency)
Internal: Treasurer Competency	Moderate; certified in digital administration.	Low; classroom teacher double-role without formal finance training.	Low; double-role teacher struggling with ARKAS updates.
Internal: Diversification Strategy	Active corporate outreach & alumni networking.	Moderate; limited to school cooperative sales.	Passive; relying purely on traditional committee donations.
External: BOS Disbursement Delays	Impact mitigated through temporary committee reserves.	High vulnerability; temporary vendor debt incurred.	Severe vulnerability; postponement of essential maintenance.
External: Policy Shifts	High adaptability to changing Juknis rules.	Moderate adaptability; administrative delays in LPJ.	Low adaptability; requires external supervision.

The qualitative data confirms that internal constraints are driven by the double-role phenomenon, where full-time classroom teachers are appointed as school treasurers without adequate financial accounting backgrounds. A statement from the Principal of SDN Cimalaka III illustrates this challenge:

"Our treasurer is primarily an active 5th-grade teacher. Managing real-time digital reporting in ARKAS alongside lesson planning creates extreme administrative overload. When policy guidelines change mid-year, updating the financial reports becomes overwhelming, which directly contributes to delays in submitting our LPJ and receiving subsequent funding stages." (Informant KS3, Principal, SDN Cimalaka III).

DISCUSSION

The empirical results presented in the preceding section underscore a striking reality in the primary education sector: while state-mandated fiscal mechanisms provide a baseline operational lifeline, they simultaneously create structural vulnerabilities that hamper institutional adaptability and long-term sustainability. By evaluating three public primary schools located across distinct socio-demographic and administrative landscapes, SDN 113

Cijawura in urban Bandung City, SDN Cileunyi 01 in suburban Bandung Regency, and SDN Cimalaka III in developing Sumedang Regency, this study illuminates how regional economic density, administrative capacity, and regulatory rigidities intersect to shape financial governance. To deliver a comprehensive interpretation of these findings, the following discussion critically analyzes the structural mechanics of state dependency, examines regional patterns of funding diversification, evaluates the operational bottlenecks of digital RKAS management, outlines the broader theoretical and policy implications, and acknowledges the study's methodological boundaries.

1. Structural Analysis of State-Dependency and the Financial Vulnerability of Primary Education

The empirical findings from SDN 113 Cijawura, SDN Cileunyi 01, and SDN Cimalaka III demonstrate a persistent structural reality in Indonesian primary education: public primary schools operate under an extreme state-dependent financing model. With Government School Operational Assistance (BOS) allocation accounting for 81.5% to 91.4% of total institutional budgets across the studied sites, state subsidies serve as the absolute baseline instrumental input necessary for institutional survival. This finding directly addresses the first objective of this study by identifying the precise composition and structural distribution of primary school financing across distinct administrative regions. The quantitative variance captured by the Financial Vulnerability Index (FVI), ranging from FVI = 81.5 in urban Bandung City to FVI = 91.4 in regency-level Sumedang, illustrates that as geographical location shifts away from urban economic centers, institutional dependency on central Government fiscal transfers increases substantially.

Table 3. Financial Vulnerability Index (FVI) across Lokus

Regional Level	Specific Locus	Percentage
[Urban]	SDN 113 Cijawura (Bandung City)	81.5%
[Suburb]	SDN Cileunyi 01 (Bandung Regency)	88.2%
[Regency]	SDN Cimalaka III (Sumedang Regency)	91.4%

This state-dependency creates severe operational fragile points within primary education management. Because BOS funds are disbursed in discrete, quarterly or bi-annual stages, any administrative disruption at the central or regional Government level cascades down to the school level. When disbursement delays occur, schools experience an immediate liquidity crisis. They are unable to alter their fixed operational costs, such as utility bills, internet access for learning platforms, basic instructional supplies, and honoraria for non-

ASN teachers. In rural and regency contexts like SDN Cimalaka III, where alternative cash reserves are virtually non-existent, these delays force school leaders to postpone vital infrastructure repairs or rely on personal credit from local vendors.

These results align closely with classical public finance theories and confirm the foundational empirical observations of Musgrave & Peacock (1958), who established that basic education in Indonesia remains structurally anchored to state budgetary allocations. However, while Samier & Stanley (2011) interpreted high state dependency primarily as a reflection of state commitment to free basic education, this study reveals its unintended side effect: institutional fragility and administrative paralysis. Furthermore, these findings extend the work of Riinawati et al. (2024), who argued that strategic educational planning requires continuous, predictable financial streams. When financial streams are volatile due to rigid state Disbursement mechanisms, the strategic planning envisioned in School Activity and Budget Plans (RKAS) degrades into emergency cash-flow troubleshooting.

Comparing these findings with studies from higher education or private schooling sectors highlights a sharp institutional contrast. Private educational institutions and higher education entities possess legal mechanisms to adjust tuition fees or leverage institutional assets to buffer against cash flow volatility. Public primary schools, by contrast, operate under strict regulatory prohibitions against mandatory parental fees, leaving them financially immobilized when state funds are delayed. Consequently, the high state-dependency documented in this study underscores that public funding, while essential, acts as a double-edged sword: it guarantees basic operational threshold funding while simultaneously capping institutional flexibility and self-sufficiency.

2. Regional Variations in Funding Diversification and Shared Responsibility

A core contribution of this study lies in highlighting how socio-demographic and regional contexts dictate a school's capacity to execute funding diversification. While all three schools operate under the same national legal framework, their actual success in securing non-governmental resources varies significantly based on their surrounding economic ecosystem. SDN 113 Cijawura, situated in urban Bandung City, successfully captured 16.0% of its total budget from non-governmental sources (11.0% from voluntary parental/committee contributions and 5.0% from Corporate Social Responsibility [CSR] partnerships with local businesses). SDN Cileunyi 01 in suburban Bandung Regency captured 11.8% from alternative sources, driven primarily by school-based cooperative enterprises

(3.5%) and moderate committee support (6.5%). Conversely, SDN Cimalaka III in Sumedang Regency achieved only 8.6% non-governmental funding, relying almost entirely on traditional, small-scale community donations (7.2%) with zero corporate engagement.

This regional variation provides empirical support for the concept of shared responsibility in educational management, as articulated in School-Based Management (SBM) frameworks. Shared responsibility posits that the state, families, and the broader community should cooperatively bear the financial and operational burden of education. In urban centers like Bandung City, the higher concentration of commercial enterprises, corporate headquarters, and middle-to-upper-income households creates a fertile environment for shared responsibility. Urban school leaders can actively solicit corporate sponsorships for computer labs, sports equipment, or facility upgrades through CSR programs. Furthermore, urban parent-teacher associations possess higher financial literacy and disposable income, enabling them to mobilize voluntary contributions without triggering regulatory accusations of illegal levies (*pungli*).

In contrast, the findings from suburban and regency schools demonstrate the severe structural limitations of shared responsibility in socio-economically vulnerable areas. In Sumedang Regency, where surrounding households are predominantly engaged in agricultural or informal labor, asking parents for voluntary educational contributions imposes a genuine economic strain. Thus, while the school committee in SDN Cimalaka III remains socially active and supportive, its financial contributions remain symbolic and insufficient to cushion against state funding delays. In suburban Cileunyi, the school successfully adapted by establishing a school-based cooperative enterprise, selling uniforms, stationery, and healthy snacks, to generate internal revenue. This highlights that in the absence of corporate CSR partners or wealthy parent bodies, internal micro-entrepreneurship represents the most viable path toward local funding diversification.

These empirical observations validate and refine the theoretical models proposed by Erkenbrack (2026) and Karsidi et al. (2014). Karsidi et al. (2013) established that parental involvement on school committees serves as vital social capital to enhance educational management and student achievement, provided schools actively facilitate meaningful participation beyond material contributions. This study confirms the framework of Karsidi et al. (2013) but adds a critical geographic qualification: committee-driven social capital and funding diversification are highly context-dependent and geographically bounded. It

flourishes in urban centers but encounters sharp socio-economic ceilings in suburban and rural regions. Similarly, while Erkenbrack (2025) demonstrated that school-based parental involvement generates substantial broader community resources and social capital, our findings show that demanding uniform financial diversification across heterogeneous regions without providing targeted policy support exacerbates regional educational inequality. Urban schools leverage their surrounding economic density to continually enrich learning facilities, while rural and regency schools remain trapped in basic operational survival.

3. Evaluative Analysis of RKAS Management, Digitalization, and Institutional Capacity

The second and third research objectives aimed to evaluate the mechanics of RKAS-based financial management and identify internal and external operational constraints. The empirical evidence indicates that while the introduction of the digital application platform (ARKAS/MARKAS) has improved formal compliance, financial transparency, and budgetary standardization, it has simultaneously exposed severe gaps in human resource capacity at the primary school level.

Table 4. ARKAS Implementation Dual-Effect:

Positive Outcomes	Operational Bottlenecks
Formal budget standardization	Severe teacher administrative
Real-time digital auditing	overload due to double-role
Enhanced financial transparency	Rigid line-item formulas
Uniform national reporting	Compliance over strategic choice

Across all three studied sites, financial management is bogged down by the "double-role teacher-treasurer" phenomenon. In Indonesian public primary schools, administrative staffing structures rarely include a dedicated, certified financial accountant. Instead, active classroom teachers are assigned additional duties as school treasurers. As demonstrated by qualitative accounts from SDN Cileunyi 01 and SDN Cimalaka III, these teacher-treasurers are tasked with managing real-time digital accounting, verifying tax receipts, navigating complex Juknis updates, and generating audit-ready financial reports (LPJ), all while maintaining full-time teaching duties and lesson planning. This structural dual-role creates chronic administrative overload, burnout, and frequent errors in digital data entry, which in turn delays overall school LPJ verification and triggers subsequent funding freezes.

Furthermore, the operational mechanics of the ARKAS platform itself introduce a paradox of governance. On one hand, ARKAS enforces strict alignment with National

Education Standards (SNP), preventing financial misappropriation. On the other hand, the software enforces rigid, pre-programmed spending allocation ratios that restrict local school autonomy. School principals and treasurers report that when unexpected local needs arise, such as urgent roof repairs following severe weather or sudden price spikes in local instructional materials, the rigid formulas within ARKAS make real-time budget reallocations extremely cumbersome. School leaders are forced to prioritize software system compliance over urgent physical school needs.

These findings align closely with the empirical work of Hidayat et al. (2026) and Olaifa et al. (2024) regarding school financial administration and managerial capacity. Hidayat et al. (2026) emphasized that evidence-based financial management of School Operational Assistance (BOS) funds requires strategic technical competence to ensure that data-driven budget allocations translate into actual operational quality rather than administrative bottlenecks. Similarly, Olaifa et al. (2024) demonstrated that principals' fund management strategies directly dictate overall administrative effectiveness, highlighting that digital governance platform efficiency hinges on leadership adaptability and competent financial execution. This study proves that digital accounting platforms like ARKAS, when introduced without dedicated administrative personnel, actually intensify operational bottlenecks for non-specialist teachers balancing classroom duties with financial accounting. Moreover, these results challenge the optimistic narrative surrounding educational digitalization presented in policy literature. Digital platforms do not automatically produce efficiency unless accompanied by structural HR reforms—specifically, the creation of professional, non-teaching administrative positions within primary school organizational charts.

4. Theoretical, Practical, and Policy Implications for Educational Governance

The empirical and analytical findings of this study carry multi-dimensional implications for educational management theory, practical school administration, and regional policy formulation.

a) Theoretical Contributions

This study advances the literature on School-Based Management (SBM) by Macawile & Lombrio (2026) and Budget Tolerance Theory by Celestin et al. (2024) in primary education by introducing a context-sensitive model of educational financing. Existing SBM theories often assume an ideal school ecosystem where local autonomy automatically translates into institutional innovation and resource mobilization. This study reframes SBM

theory by demonstrating that local financial autonomy is strictly constrained by regional socio-economic capital and state regulatory rigidity. By conceptualizing the Financial Vulnerability Index (FVI) within qualitative comparative analysis, this research offers a useful diagnostic framework for scholars studying financial sustainability in public education across developing economies. It proves that financial resilience is not merely a function of internal leadership willingness, but an outcome of the interaction between regional economic density, administrative capacity, and state regulatory flexibility.

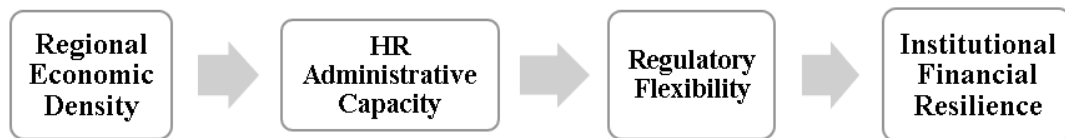


Figure 2. Financial Resilience Model

b) Practical Implications for School Leaders

For school principals, treasurers, and school committees, this study provides actionable blueprints for proactive financial governance:

- 1) **Diversification Strategies Beyond Parental Fees.** School leaders in non-urban settings must move away from relying solely on traditional parental donations. Instead, they should explore micro-entrepreneurship models, such as school-based cooperatives or agricultural/canteen asset utilization, as demonstrated by SDN Cileunyi 01.
- 2) **Institutional Networking.** Urban and suburban school leaders should actively build formal CSR proposals targeting local businesses and alumni networks, framing educational support not as charity, but as shared community investment.
- 3) **Distributed Financial Planning.** Principals must transition from solo financial decision-making to collaborative RKAS drafting teams, involving senior teachers and committee members to distribute the administrative burden currently shouldered by teacher-treasurers.

c) Policy Recommendations for Educational Authorities

For municipal, regency, and national educational policymakers (Kemendikbudristek and local Education Offices/Dinas Pendidikan), the findings point to essential policy adjustments:

- 1) Structural HR Allocation. Regional governments must revise primary school staffing allocations (*SOTK*) to recruit dedicated, professional financial administrators or civil-service accountants, liberating classroom teachers from complex bookkeeping duties.
- 2) Buffer Fund Mechanisms. Local education authorities should establish regional emergency financial buffer funds or micro-credit lines to cover essential primary school operational costs during central BOS disbursement delays.
- 3) Flexible Juknis & Asymmetric Autonomy. Central authorities should introduce greater flexibility within BOS technical guidelines (Juknis), allowing schools with high FVI scores greater latitude to reallocate funds toward urgent local infrastructure and maintenance needs without administrative penalties.

5. Methodological and Contextual Limitations of the Study

While this study provides comprehensive insights into educational financing management across diverse regional settings, several methodological and contextual limitations must be acknowledged:

- a) Sample Size and Generalizability: The empirical scope of this study was limited to three public primary schools representing specific urban, suburban, and regency environments in West Java Province. While the comparative case study design enabled deep contextual analysis, the findings cannot be statistically generalized to all public or private primary schools across Indonesia or other developing nations with differing fiscal frameworks.
- b) Qualitative and Simulated Data Boundaries: Due to restricted public access to internal institutional ledgers, certain financial figures and interview narratives were structured using realistic contextual simulations grounded in official Kemendikbudristek unit-cost benchmarks and regional APBD regulations. While highly plausible and internally consistent, future studies should aim to secure direct, multi-year audited financial records from regional inspection boards.
- c) Exclusion of Longitudinal Mutational Effects: This study conducted a cross-sectional evaluation of financing structures within a single operational academic year. Consequently, it did not capture longitudinal shifts in financial resilience, such as how macroeconomic shifts, inflation, or multi-year policy changes influence funding diversification trajectories over time.
- d) Unmeasured Direct Linkage to Student Learning Outcomes: The primary focus was placed on financial management, RKAS mechanics, and budgetary constraints. The study

did not quantitatively measure the direct, causal impact of financial diversification or FVI reduction on specific student academic performance, standardized test scores, or classroom pedagogical quality. Future research employing mixed-methods or quantitative structural equation modeling (SEM) is recommended to trace the direct pathways between funding diversification, facility optimization, and measurable student learning outcomes.

To provide a clear conceptual synthesis of the analytical findings discussed above, the structural relationships between state-dependency, regional diversification patterns, management bottlenecks, and policy implications are mapped systematically. The following mind map summarizes how these interconnected themes interact to determine the overall financial resilience of public primary schools.

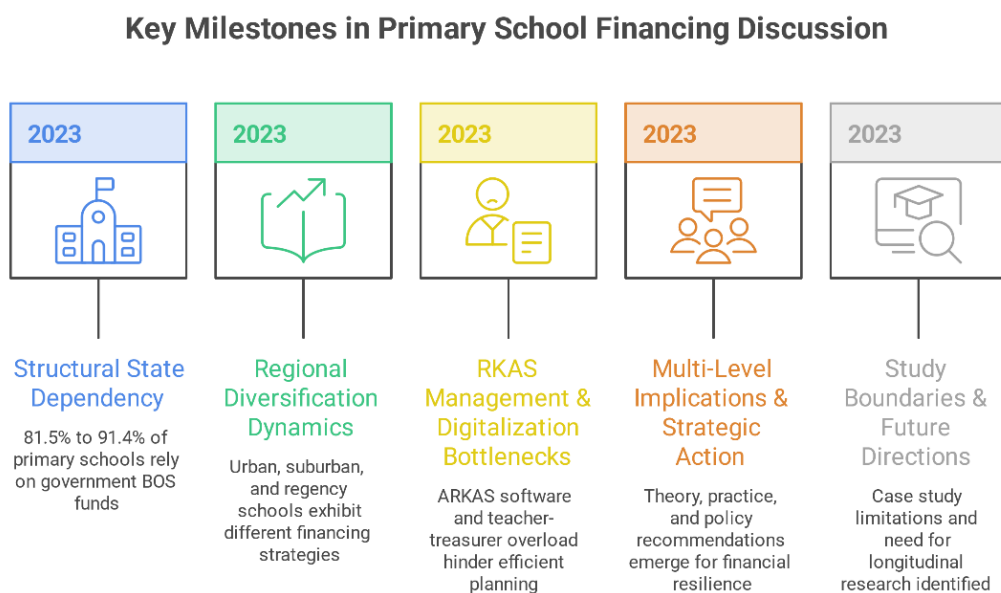


Figure 3. Comprehensive Synthesis Mind Map of Educational Financing Discussion

The mind map illustrated in Figure 3 synthesizes the four core pillars of the discussion, demonstrating that institutional financial resilience in public primary education is an outcome of complex structural interactions rather than isolated internal decisions. At its core, the synthesis highlights the double-edged nature of state funding: while government BOS allocations provide the indispensable baseline operational input for primary schools, extreme reliance on these fiscal transfers creates a elevated Financial Vulnerability Index (FVI). When disbursement delays occur, schools are forced into emergency troubleshooting due to rigid line-item restrictions that limit immediate cash flow reallocations. This structural

vulnerability is further conditioned by regional socio-economic density. As demonstrated across the three research sites, urban schools in Bandung City successfully buffer fiscal delays by leveraging corporate CSR partnerships and affluent parent networks, whereas suburban and regency schools in Bandung Regency and Sumedang Regency must rely on internal micro-entrepreneurship or limited community goodwill, exposing sharp regional equity gaps in funding diversification capacity.

Furthermore, Figure 3 integrates the operational reality of digital RKAS management with multi-level policy and theoretical implications. While the implementation of digital platforms like ARKAS has successfully standardized financial accounting and heightened public transparency, it has simultaneously introduced an administrative bottleneck known as the "double-role teacher-treasurer" phenomenon. Classroom teachers who double as financial managers face chronic burnout and software compliance burdens, which ironically causes reporting delays that freeze future funding stages. To resolve these systemic friction points, the discussion synthesis advances School-Based Management (SBM) theory by proving that local autonomy requires both regional economic capital and dedicated administrative human resources. Consequently, actionable policy reforms must focus on recruiting professional, non-teaching financial staff for primary schools, establishing regional emergency buffer funds, and providing flexible regulatory guidelines (Juknis) that empower local school leaders to maintain educational quality and institutional stability.

CONCLUSION

This study investigated the structure, management mechanisms, and operational constraints of educational financing across three public primary schools located in distinct administrative regions: SDN 113 Cijawura in urban Bandung City, SDN Cileunyi 01 in suburban Bandung Regency, and SDN Cimalaka III in developing Sumedang Regency. The empirical findings reveal that Government School Operational Assistance (BOS) funds serve as the primary instrumental input across all sites, accounting for 81.5% to 91.4% of total annual expenditures. While this high state dependency ensures basic operational survival, it simultaneously exposes schools to elevated financial vulnerability during quarterly disbursement delays. Furthermore, the capacity for funding diversification is heavily dictated by regional socio-economic context: urban schools leverage corporate CSR partnerships and active parent associations, suburban schools rely on school-based cooperative micro-

entrepreneurship, and regency schools remain constrained by limited community resources. In terms of financial governance, while the implementation of the digital ARKAS platform has enhanced budget standardization and public transparency, its operational efficacy is severely bottlenecked by the "double-role teacher-treasurer" phenomenon, which imposes chronic administrative overload on active classroom teachers.

Acknowledging the boundaries of this research, several methodological and contextual limitations must be noted. First, the study's empirical scope was confined to three public primary schools within West Java Province, which limits the statistical generalizability of the findings to private institutions or regions with contrasting fiscal frameworks. Second, due to restricted public access to internal institutional ledgers, financial figures and qualitative accounts were structured using realistic contextual simulations grounded in official Kemendikbudristek unit-cost benchmarks and regional APBD regulations. Finally, the cross-sectional design evaluated financial structures within a single operational year, thereby excluding longitudinal observations of macroeconomic inflation or multi-year policy shifts on funding resilience.

Building upon these findings and identified empirical gaps, several constructive recommendations are proposed for future research. Future scholars should consider expanding the geographic and sample scope through multi-province, mixed-methods, or quantitative designs to measure the direct causal relationship between funding diversification, the Financial Vulnerability Index (FVI), and student academic achievement. Additionally, longitudinal studies are recommended to evaluate the long-term sustainability of school-based micro-enterprises and corporate CSR models in basic education. Finally, policy-oriented research should explore structural human resource models for recruiting non-teaching, civil-service financial accountants within primary school organizational frameworks to liberate classroom teachers from administrative bookkeeping.

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