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EFFECTS OF BUDGET DEFICITS ON SUPPLY OF ESSENTIAL GOODS AND SERVICES IN PUBLIC SECONDARY SCHOOLS IN NYANDARUA COUNTY, KENYA

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ABSTRACT

Budget deficits, often caused by delayed fee payments from parents and government funds procurement of essential supplies, and participation in co-curricular activities for many schools.. This necessitated this study on the effect of budget deficits on the provision of key educational services in public secondary schools in Nyandarua County, Kenya. A descriptive survey design was used, gathering data from 82 school principals through questionnaires and interviews with education officials. Reliability of the questionnaire was confirmed through a pilot study in fifteen secondary schools, yielding a Cronbach coefficient of 0.81, indicating strong internal consistency. Quantitative data were coded and analyzed using SPSS version 24.0, with interpretation of qualitative data supplementing the findings. The results findings indicated that Budget deficit affect supplies of essential goods and services in most schools evidenced through failure to plan for acquisition of supplies, struggling to service debts and forced batch purchases. Affected supplies due to budget deficit included stationeries, food stuffs, measuring and heating equipment and first aid kits, sports equipment, costumes, fire-fighting equipment mathematical equipment, and information and communication technologies. Supplies largely affected included laboratory chemical and equipment, detergents and computer supply. Regression analysis revealed that the influence of budget deficit (x) on supplies of essential goods and services (y) is not significant. The study recommends timely disbursement of funds and the implementation of income-generating activities in schools and prioritization of essential supplies as mitigation measures.

Key Words: *Public Secondary Schools, Budget deficits, Education, Supply, Essential Goods and Services*

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BACKGROUND

Education is a fundamental human right and key to human and economic progress. Sifuna and Sawamura (2010) emphasize that quality education is critical for socio-economic development. In Kenya, the curriculum has been continuously reformed to align with national needs, aiming at developing the skills and competencies necessary for the country's human capital (RoK,2012). Quality education depends not only on curriculum content but also on efficient delivery, including necessary resources availability like equipment, staff, and co-curricular activities (Georgescu, 2010).

Proper financial resource management, starting with budgeting, is crucial for curriculum implementation. Effective budgeting aligns resources with needs, ensuring the delivery of quality education services (Guess & Leloup, 2010). Indicators of quality education include procurement of supplies among others, poor fiscal planning can result in deficits and compromised education services. UNESCO (2014) reported significant differences in education funding between countries, with the Philippines spending only $64 per secondary student compared to $7,500 in the U.S. and $5,000 in Singapore. In Africa, the abolition of school fees improved access to education, but challenges remain in achieving the goal of Education for All (World Bank, 2008)

In Sub-Saharan Africa, financial management disparities between schools serving different socio-economic groups persist, with marginalized schools often receiving less support (Prew, Msimango, & Chaka, 2011). In Kenya, the introduction of Free Primary Education (FPE) in 2003 led to shifts in school demand, as wealthier families opted for private schools, leading to socioeconomic segregation (Bold et al., 2011). Free Day Secondary Education (FDSE), introduced in 2008, aimed to improve access, but delays in government funding have resulted in budget deficits, affecting service delivery (Mshindi, 2015).

Despite these challenges, there are isolated successes in extracurricular activities and staffing, but overall, inadequate funding continues to hinder the delivery of quality education in Nyandarua County. This study examines the impact of budget deficits on supply of essential goods and services in public secondary schools in Nyandarua County, Kenya.

Statement of the Problem

Provision of educational services requires proper budgeting and funding. Public secondary schools in Kenya are Government sponsored but are forced to ask parents to bear the burden for provision of some services, expenses of which cannot be borne sufficiently by the annual Government allocation of Kshs.22240 per student, which may often flactuate. Indicators of quality educational services include quality procurement plans for supplies among others. Although secondary school education policy makers, Ministry of Education (MoE) officials, school principals, and teachers should devote equal emphasis on procurement of essential goods and services in public secondary schools in Nyandarua County, Kenya, budget limitations may inhibit these efforts. The effects of financial shortages on the provision of educational services in public secondary schools in Nyandarua County are little documented empirically. In order to help the pertinent educational stakeholders, make informed policy decisions, this study aimed to close this information gap.

Study Objective

The study aimed at investigating the effect of budget deficits on supply of essential goods and services in public secondary schools in Nyandarua County, Kenya.

Hypotheses

Budget deficits have no statistically significant effect on the supply of essential goods and services in public secondary schools in Nyandarua County, Kenya.

LITERATURE REVIEW

Overview of Secondary School Funding in Kenya

In Kenya, secondary school education is funded through a cost-sharing model involving both the government and parents, initiated in 1988 to balance modernization with financial constraints without compromising essential social services (Ministry of Education Science and Technology, 1996). The government covers professional services and administrative costs, while parents, communities and sponsors contribute towards facilities, books, and consumables (Njeru, 2003). The concept of cost-sharing is not new, as the "harambee" movement historically involved local communities in funding education (Abagi, 1991). By 1989, cost-sharing was formally integrated into education policy to alleviate government expenditure, following the Sessional Paper No. 1 of 1986 (GOK, 1986).

Literature review findings support cost-sharing as a strategy to alleviate government financial burdens while sustaining education funding (Rono,, 1988). However, the system has faced criticism for mismanagement and heavy reliance on parents for secondary school expenses, often without adequate consideration of their financial situations (Olembo, 1986). Despite government efforts to subsidize education, schools have struggled with funding gaps, leading to the adoption of income-generating activities (IGAs) to supplement their budgets (Nyonje, 2012). Additionally, non-governmental organizations (NGOs) have increasingly contributed to education funding and policy influence (Miller-Grandvaux et al., 2002).

In the UK and globally, budget deficits have led to significant school closures and staff reductions, highlighting the universal challenge of financing education (Johson, 2013). The UK's approach to budget management emphasizes school autonomy and strategic financial planning to optimize educational outcomes (Government of the UK, 2014). Despite global advances in enrollment rates, significant challenges remain in ensuring universal access to education, particularly in developing regions where funding disparities persist (UNESCO, 2011; UIS, 2011).

In Kenya, inadequate resource disbursement and policy inconsistencies have hindered educational progress, resulting in low enrollment, retention, and quality issues (Abagi & Wasunna, 2000). While the abolition of school fees was intended to improve access, it alone does not address the multifaceted challenges of educational finance, which require comprehensive policy and financial strategies (UNESCO, 2006). Studies reveal that despite efforts to diversify funding sources, such as IGAs and donor contributions, these remain insufficient to meet the comprehensive financial needs of secondary education (Getange et al., 2014). The ideal of universal access to free education remains aspirational, constrained by financial realities and global educational policy gaps (Tomasevski, 2008).

Sources of Budget Deficits in Public Secondary Schools

A budget deficit occurs when an institution's expenses exceed its income. In schools, this can result from delayed or insufficient funding, reluctance of parents to pay fees, rising costs, debts, high overdraft rates, or emergencies (Institute of Education Sciences, 2003). In Ghana, budget deficits threaten the government's education goals, such as building new schools (McTernan, 2014). According to Getange, Onkeo, & Orodho, 2014, slow government funding and reduced parent contributions have led to large deficits in public day secondary schools, where sustainable income-generating solutions are lacking in Kenya. This study was informed by challenges in fiscal planning facing public day secondary schools and how this affects supply of essential goods in Nyandarua County.

Effects of Budget Deficits on Supply of Essential Goods and Services

Budgeting is essential for translating financial resources into educational goals and activities in schools. Effective budgeting aligns financial planning with instructional goals, enhancing both financial and educational accountability (Institute of Education Sciences, 2003). When schools face budget deficits, they often struggle to provide adequate teaching materials and facilities, negatively impacting students' academic performance (Jekayinfa, 2002; Savacsi & Tomul, 2013). Research has shown a significant link between resource allocation and student outcomes, underscoring the importance of adequate funding for academic achievement (Obadara & Alaka, 2010).

In Kenya, secondary schools face substantial challenges in resource mobilization. Studies have highlighted issues such as insufficient facilities and funding constraints, exacerbated by government restrictions on fundraising activities (Asyago, 2005; Mugo, 2006). Although the introduction of Free Day Secondary Education (FDSE) aimed to alleviate some financial pressures, resource mobilization problems persist (Getange et al., 2014). These challenges affect not only the availability of educational materials but also crucial services like health facilities, contributing to student absenteeism and reduced academic performance (Nzoka & Orodho, 2014). Overall, budget deficits significantly undermine schools' capacity to provide quality education and necessary services (Getange, Onkeo, & Orodho, 2014).

Theoretical Framework

The present study was underpinned by two theories: The Social Network Theory of Social Capital by Lin Nan (2001) and the Capital Theory of School Effectiveness and Improvement by Hargreave (2001).

The Social Network Capital Theory of Social Capital

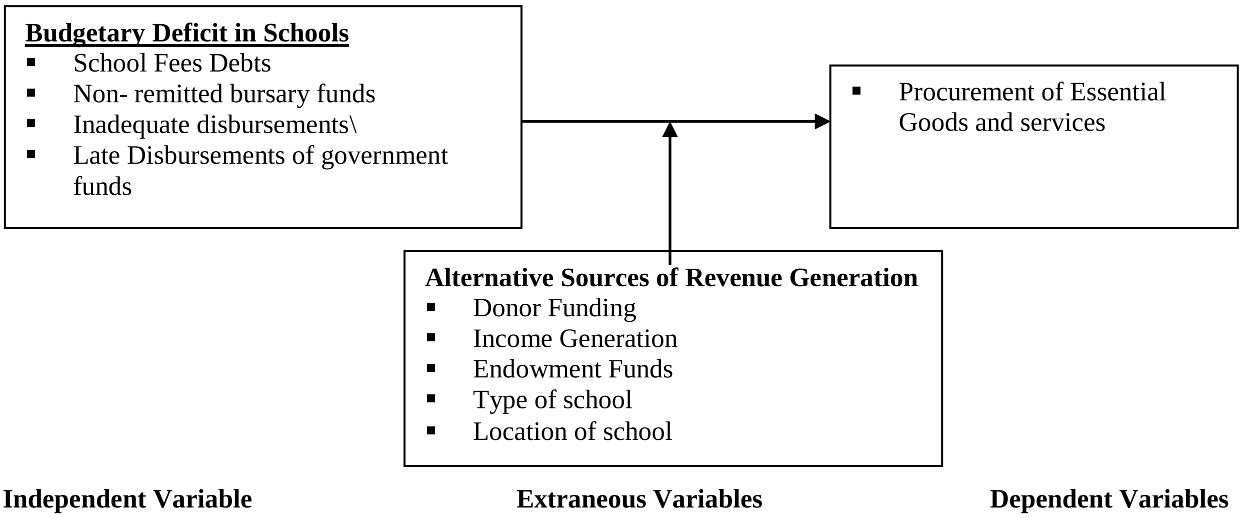
The Social Network Capital Theory of Social Capital, whose proponent is Hargreaves (2001) has four theoretical pillars: results, leverage, intellectual capital, and social capital. These pillars are connected to the intended learning outcomes and an educational institution's funding tactics. In this context, leverage measures the link between teacher input and educational output, whereas outcomes are metrics that reflect moral and cognitive qualities. Therefore, Hargreaves contends in his conceptualization of intellectual capital that good schools focus on effective tactics that allow a substantial impact to arise from relatively minimal effort (that is, working smarter not harder), as opposed to instructors exerting excessive effort and producing little fruit. High leverage tactics are combined in exceptional schools. High leverage works have an impact on a school's capacity for effectiveness.

The degree to which education's explicit aims are met as well as any unforeseen effects of the procedures used are both represented in the programme's results. Hargreaves (2001), taking Aristotle as his mentor, distinguishes between two types of excellences: moral excellences like courage, justice, and self-control leverage, and intellectual excellences like science, art, and practical wisdom. According to Hargreaves, outcomes can be greatly impacted by relatively low levels of teacher effort. He goes on to say that there are two parts to outcomes: evidence-based practice and innovation.

According to Hargreaves (2001) theory, the generation of new information and the ability to transfer knowledge between contexts and individuals are two significant processes that contribute to the growth of "intellectual capital". The social capital needed to produce and sustain this intellectual capital is made up of both structural and cultural elements. The cultural element mostly consists of adult-to-adult trust as well as the development of reciprocity and teamwork. Networks and cooperative relationships among stakeholders apart from students are the structural component.

According to the theory, education is a service that instructors provide to students with the help of other stakeholders. When talking about leverage, Hargreaves leaves out a significant factor. That is, if learners want to learn because they regard themselves as citizens, rather than tourists, in the classroom, some barriers to education can be removed. One major barrier is funds from the stakeholders. In the context of this study, Hargreaves theory informs the role of stakeholders that include the Government and parents whose failure to collaborate through funding would compromise the capacity of the school to provide quality education services as would be evidence through outcome. However, though in discussing trust, Tsang (2010) invites us to think about the potential trust that students may have in their institutions. This analysis was skewed toward maintaining schools' ability to provide high-quality education. There was a need to take into account a second theory, the Social Network Theory of Social Capital, because the first theory did not address how schools might create or maintain this.

Conceptual Framework



METHODOLOGY

This study employed a descriptive research design, which focuses on characterizing the current state of affairs and gathering information from a population sample through questionnaires or interviews (Kothari, 2004). In this case, questionnaires were given to school principals and bursars to assess how budget shortfalls impacted the delivery of essential education services in public secondary schools in Nyandarua County.

The study was conducted in public secondary schools in Nyandarua County, with schools clustered according to the Sub-counties where they are located. The study employed two stages of basic random sampling and geographic clustered sampling. Simple random sampling was used to select public schools from each Sub-county, ensuring each school had an equal chance of being included. The sample frame consisted of a list of all public secondary schools in each Sub-county, provided by the County Director of Education. "Cluster sampling" is a sample technique that has the following qualities: The population is divided into n groupings, or clusters, and n clusters are randomly selected by the researcher to be included in the sample. Every cluster's number of observations, M_(i), is known, and the overall sample, M, is defined as M = M1 + M2 + M3 +... + MN-1 + MN. Every component of the population was allocated to a single cluster. A subset of components inside particular clusters are chosen at random to be included in the sample in two stages of sampling (Berman, 2015). The sample size was determined using Krejcie and Morgan's (1970) table for sample size determination, as presented by Chuan (2006). According to the table, 82 schools were sampled from a population of 105. These 82 schools served as the sampling units, with the Principals from each school participating in the study.

The study utilized a semi-structured questionnaire and an interview schedule to gather both quantitative and qualitative primary data. The semi-structured questionnaire included a mix of predetermined and open-ended questions, allowing for flexibility in responses. The self-administered questionnaires were distributed and collected later, with high return rates. They were segmented into sections: Part A covered respondent demographics and school funding, Part B addressed the impact of budget deficits on supplies, Part C focused on procurement, Part D on staffing, and Part E on fiscal planning challenges and solutions. Qualitative data was collected through face-to-face interviews using an interview schedule, targeting the County Director of

Education (CDE). The responses were recorded, transcribed, and used to complement the analysis of the quantitative data from the questionnaires.

Experts from the Department of Curriculum and Education Management examined the research tools used in this study, as per the researcher's request. This resulted in revisions that ensured that the questionnaire and the interview schedule are suitable in terms of face, content and construct validity.

Data analysis in this study involved organizing and processing data using SPSS version 24.0, where data was coded and entered for both qualitative and quantitative analysis. The researcher conducted a thematic analysis to align findings with study objectives, and whereby interpretation of qualitative data supplemented the quantitative results. The study utilized regression analysis, including both simple and multiple regression models, to determine the relationship between independent and dependent variables. The simple regression model examined the effect of budget deficit on the supply of essential goods and services.

RESULTS

The study revealed that budget deficits statistically, it significantly affect schools' financial planning and supply acquisition. A majority (48.7% strongly agreed, 32.1% agreed) indicated that their schools struggle to plan for servicing debts owed to suppliers due to budget shortfalls. Similarly, 37.2% strongly agreed and another 37.2% agreed that budget deficits make it difficult to plan for timely acquisition of supplies. Additionally, 44.9% strongly agreed and 33.3% agreed that schools are forced to rely on batch purchases, while 35.9% strongly agreed and 48.7% agreed that budget deficits result in schools going without key supplies like chalk and exercise books. Budget deficit affect supplies of essential goods and services in most schools evidenced through failure to plan for acquisition of supplies, struggling to service debts and forced batch purchases. Affected supplies due to budget deficit included stationeries, food stuffs, measuring and heating equipment and first aid kits, sports equipment, costumes, fire-fighting equipment mathematical equipment, and information and communication technologies. Supplies largely affected included laboratory chemical and equipment, detergents and computer supply. The study results revealed a weak, positive and statistically significant ($r=0.071$; $p<0.05$) relationship between budget deficits and procurement of supplies of essential goods and services. The analysis implied that budget deficits does influence supplies of essential goods and services in public secondary schools to a low positive extent.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that budget deficits in public secondary schools, stem from delayed FSE funds, late fee payments by parents, price changes, increased enrollment, debts to suppliers, and failed income-generating activities. These deficits hinder the acquisition of essential supplies like laboratory equipment, food, and ICT tools. Budget deficits do negative affect procurement of essential supplies. To address these, timely fund disbursement, emergency planning, and moderated bank overdraft interest rates are recommended. Overall, budget deficits significantly have a lower effect on supply of essential goods and services.

The study recommends that the Government and parents should ensure timely and adequate fund disbursement, with public guidelines encouraging prompt fee payment. School administrators should manage bad debts by controlling unplanned expenses and budgeting for price increases. In addition, procurement should prioritize essential items like food and learning materials without stakeholder interference.

REFERENCES

Berman, H. (2015). What is Cluster Sampling? Georgia, USA.

Georgescu, D. (2010). *What Makes a Good Quality School Curriculum?* Geneva: Academia.

GOK, ,. (1986). *Sessional Paper No. 1 on Economic Management for Renewed Growth.* Nairobi: Government Printers.

Govermnment of the United Kingdom. (2014, September). *Implementing Yout School's Approach to pay: Departmental Advice for Maintained Schools and Local Authorities.* Retrieved from www.gov.uk: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/356378/Implementing_your_schools_approach_to_pay_departmental_advice.pdf

Guess, G. M., & Leloup, L. T. (2010). *Comparative public budgeting.* Albany, NY: University of New York Press.

Institute of Education Sciences. (2003). *Financial accounting of local state school Systems Chapter 3: Budgeting*. (I. f. Sciences, Producer) Retrieved from inces.org: https://nces.ed.gov/pubs2004/h2r2/ch_3.asp

Johnson, M. A. (2013, March 21). Chicago Closing 54 Schools in Face of $1 Billion Deficit. Chicago, USA: NBC News.

McTernan, B. A. (2014, January 03). Ghana's Economy Goes on Trial . Accra, Ghana.

Ministry of Education Science and Technology. (1996). *Kenya Development of Education 1995 to 1996.* Nairobi: UNESCO.

Mshindi, T. (2015, October 14). State Must Send Funds to Avoid School Crisis. Nairobi, Kenya.

Nyonje, D. A. (2012). *Influence of Income Generating Activities on Teaching and Learning Environment in Public Secondary Schools in Bungoma South.* Nairobi: University of Nairobi.

Prew, M., Msimango, S., & Chaka, M. (2011). Literature Review on School Funding in Sub-Saharan Africa. *Johannesburg: CEPD.*

RoK. (2012). *A policy Framework for Education and Training: Reforming Education and Training in Kenya.* Nairobi: Government Printer.

Rono,, P. K. (1988). *"Cost-Sharing in Education".* Nairobi: Kenyatta University Press.

Scheerens, J., Luyten, H., & van Ravens, J. (2011). *Perspectives on Educational Quality.* New York: Springer.

Tsang, K.-K. (2010). School Social Capital and School Effectiveness. *Education Journal, 37*(1-2), 119-136.

Wolrd Bank. (2008). *Abolishing School Fees in Africa in Africa:- Lessons from Ethiopia, Ghana, Kenya, Malawi, and Mozambique.* Washington DC: The International Bank for Reconstruction and Development / The World Bank.

Zhang, X. (2008). chool social capital and environment adaptation. *The Modern Education Journal, 141*(3), 14-17.