

# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

## Creation of Fiscal Space for Sustainability of Private Second Cycle Institutions: The Role of Income Diversification

Francis Osei-Kuffour

Lecturer, School of Business, Valley View University, Ghana

### Abstract:

*Private schools around the world continue to face sustainability challenges due to limitations in fiscal space as they strive to provide top notch academic services to their customers. Some educational experts have predicted the closure of many private schools in the last few years as a result of low financial stability indicators of these academic institutions. From this state of affairs, this study sort to examine the role of income diversification in the creation of fiscal space for academic sustainability of private second cycle educational institutions. A quantitative research approach was adopted. The study made use of descriptive correlational design. Descriptive statistics based on the central tendency with SPSS and regression process by Hayes model 1 were used to analyze and interpret the data collected from 190 private second cycle educational institutions in Ghana, randomly selected out of the population of 315, to answer self-constructed questionnaire. Results showed that private second cycle educational institutions have very low levels of income diversification activities to create fiscal space. There was a positive, significant influence of creation of fiscal space on financial sustainability. The findings have implications for income diversification strategies which create fiscal space and harness institutional income levels for academic and/or financial sustainability.*

**Keywords:** Fiscal Space, academic sustainability, income diversification, ventures, financial self-sufficiency

### 1. Introduction

Private Second Cycle Educational Institutions (PSCEIs) continue to face limitations in fiscal space in their efforts to provide quality academic services to their customers, who access educational services with the hope of building their capacity and potential for continuous studies into higher educational levels. This state of affairs has provided a basis for some educational experts to predict PSCEIs' closure in the near future (Akwah, 2018; Busby, 2019; Citinews, 2019; Ferdinand, 2020; Molele & Tefu, 2020). PSCEIs may not be motivated, solely, for profitability, but are expected to, at least, break-even and continue in business for the good of their owners and society (Oketch et al., 2010).

In the United States of America, Demirbag (2014) asserted that owing to the growing shortfalls in their annual budget, many PSCEIs seem to live with barely enough fiscal resources despite their beneficial services to the communities, as a result of overdependence on tuition income for survival.

In the United Kingdom, lack of financial reserves and limitations in the generation of additional income were cited among the top 10 challenges faced by private schools (Parnham, 2018). According to the author, many private schools operate firefighting strategies due to financial challenges. Their efforts to let out facilities to generate extra income have been unsuccessful as a result of limited margins compared to the burdens on the facilities.

According to a pan-India survey, private schools in India are currently under financial sustainability challenges as a result of their inability to collect their traditional source of income (India Today, 2020). The survey indicated that 87% of these schools were faced mounting budget deficits.

In Tanzania, heads of private secondary schools were forced to transfer the financial sustainability challenges of their institutions to parents by increasing tuition fees because efforts made by different revenue mobilization sources to finance quality education were not enough; thwarting their good plans of improving the provision of quality academic services to the populace (Amos & Koda, 2018)

In South Africa, Molele and Tefu (2020) hinted that approximately 60% of private schools across South Africa face shut-down as a result of financial sustainability challenges. These schools rely heavily on traditional source of revenue, which is not forth coming due to the inability of parents and guardians to pay their wards' school fees. Most of these schools' function from hand-to-mouth because huge discounts offered to entice parents to pay up have not yielded the required fruits.

Private second cycle educational institutions' financial sustainability challenges in Ghana are not different from the global phenomenon. More than 100 private second cycle schools faced severe financial sustainability challenges as a result of the free second cycle educational policy introduced by the National Patriotic Party government (Citinews, 2019). Many private second cycle educational institutions are crumbling due to financial challenges (Akwah, 2018). It was disheartening to hear that 21 secondary schools in the Upper West Region of Ghana were forced out in a Mathematics and Science quiz as a result of a lack of funds needed to travel to the venue of the competition (Ferdinand, 2020).

The traditional source of revenue of these institutions is decreasing due to severe competitions within and outside the environment. The emergence of the corona virus (COVID 19) in recent times added salt to injury as a result of over-reliance on the traditional source of revenue. The pandemic brought untold hardships to the world, which led to breaks of various activities, including education, at all levels due based on government's order to suspend educational activities in a bid to stem the spread of the virus. The major source of revenue was, therefore, curtailed, forcing heads of these institutions to plead for government's assistance to pay the salaries of teachers (Quartey, 2020; Dogbey, 2020).

PSCEIs have made significant impacts on the socio-economic development of world economies over the years. These achievements make their significance in providing quality services to the populace a considerable contribution in providing quality education to harness economic, social, and cultural development of societies (Ashley et al., 2014; Yanka, 2017; Kharusi & Murthy, 2018).

Various studies have looked at the financial sustainability of educational institutions (Afriyie, 2015; Nyamwega, 2016; Cernostana, 2017; Kharusi & Murthy, 2017; Ekpoh & Okpa, 2017; Adan & Keiyoro, 2018). None of these studies considered the financial sustainability challenges of the private sector in the provision of secondary education.

Therefore, the present study sought to address this research gap by looking at the role of income diversification in the creation of fiscal space for financial sustainability of private second cycle educational institutions. The results of the study were focused on national and international audience of educational institutions, especially the private ones, who seek innovative means of meeting stakeholders' expectations while sustaining their institutions for long-term survival.

This study intended to help address the financial sustainability challenges of PSCEIs based on creation of fiscal space through income diversification. Consequently, the study aimed to address the following questions:

- What is the level of income diversification as a means for creating fiscal space of PSCEIs?
- Is there a significant influence of the creation of fiscal space on the financial sustainability of PSCEIs?
- Based on the research questions, the null hypothesis of the study was:
- There is no significant influence of the creation of fiscal space on the financial sustainability of PSCEIs.
- According to Heller (2006), creation of fiscal space is the capacity of an institution to provide additional budgetary resources for operations for sustainability. Wachira (2018) added that an institution's ability to create sufficient funds to meet the cost of its current operations as well as future commitments and develop long-term objectives that outline a strong financial position in the future are made possible through the creation of fiscal space.

Cesar et al. (2018) supported the above assertions and added that fiscal space involves creating a budgetary room that allows an institution to provide resources for desired purpose without undermining fiscal sustainability. In the four pillars of the financial sustainability concept, León (2001) sort to imply that the creation of fiscal space through strategic planning, income diversification, and institutional own income generation determine the sturdy state of an institution's mission.

Creation of fiscal space involves an institution's ability to function, develop and create financing as a result of concrete policy action for enhancing resource mobilization to ensure its solvency in the changing environment to meet capital adequacy, good quality services, adequate liquidity, and stable income (Cernostana, 2017; Kharusi & Murthy, 2017; Sultana & Akter, 2018; Chang & Pitterle, 2018).

Creation of fiscal space highlights a favorable income to expenditure ratio and efficient utilization of resources in operational activities to generate enough financial resources to meet operating payments in the short to medium term and, where applicable, to allow for growth under prevailing conditions (Koleda & Oganisjana, 2015).

In principle, one of the different ways in which PSCEIs can create fiscal space is through income diversification strategies apart from donations from alumni and other stakeholders, grants from outside sources, cutting low priority expenditures to make room for more desirable ones, among others. Cutbacks in spending, as a measure for creating rooms for additional resources, have always not been easy. A cut in employee emoluments, for instance, is likely to increase rates of unemployment in various economies. This study, therefore, focuses its attention on income diversification as a key element in the creation of fiscal space for PSCEIs' long-term survival.

Income diversification has been noted to connects the practice of moving away from traditional income sources (student fees) to new, unrelated, and sustainable income streams without endangering the core duty, quality, and operations of an institution (L'Souza, 2018). Income diversification is considered as the creation of additional income besides the primary income source through new unrelated revenue sources that add to the pool of income available to an institution for operations (Ekpoh & Okpa, 2017). The authors noted that for educational institutions to survive in the long-term, diversification of funding sources is imperative.

Fentahun et al. (2018) hinted that institutions do not collect all their income from a single source and added that income diversification deals with the process of diversifying revenue portfolios and making use of a diverse mixture of resources and assets to achieve a required need, improve performance, and manage risk.

The ability of an institution to exploit non-traditional avenues of generating income from non-traditional activities to harness a shift in the way that they earn money has been identified as a major strategy for income diversification (Sonyo et al., 2015). The authors further indicated that an optimistic and diversified revenue stream broadens an institution's income-generating portfolios as it diversifies the institution and contributes to increased stability.

Researchers believe that income stability increases the financial sustainability of institutions because the diversity of income sources improves long-term financial sustainability for institutions; profit and non-for-profit, and addresses income security shortfalls that support and accumulate income for institutional expansion, engagement in non-traditional businesses, and opens avenues to expand revenue levels that help to solve current and long-term sustainability challenges (Deip & Vien, 2017; Almagtome et al., 2019; Salam et al., 2019)

In the four pillars of the financial sustainability concept, León (2001) referred to income diversification as the number of income sources that provide an institutional funding. The concept posits that 60% of an institution's total budget needs to come from different income sources rather than relying solely on the core source, which, in an unexpected variation, may limit fiscal space.

One of the noted strategies of income diversification of institutions is institutional ventures. According to Nyamwega (2016) institutional ventures involve all other income-generating activities, besides the core activities, which an institution can undertake to raise extra revenue to supplement the income from core activities. Such activities could include; school buses services, farming, hiring of classroom for use by the public, clubs and societies, production of goods, among others.

Kipkoech (2018) added that ventures help academic institutions produce extra revenue to promote financial self-sufficiency and seek to educate learners in the acquisition of entrepreneurial abilities that make graduates useful members of society when completing a college atmosphere in which technical expertise and company procedures are, individually, combined.

Researchers have observed that tuition and other fees are not able to address the increasing needs of educational institutions' clientele due to limited inflow in annual budgets. Emergence of income-generating ventures in educational institutions is an answer to resource mobilization strategies needed to support and fill in budget gaps to cover schools' expenditure without distractions from the provision of their core purpose of establishment (Ahmad & Kim-Soon, 2015; Miranda et al., 2016; Amolo & Migiro, 2017).

Various income-generating activities by educational institutions enable them to cope with unexpected decline in mainstream revenue without necessarily transmitting the shock to stakeholders because additional funds generated through institutional ventures aid in the acquisition of various materials needed for teaching and learning and other maintenance works (Alcaine, 2016; Amos & Koda, 2018).

Sustainability deals with keeping the business in existence and going on constantly (Terry, 2013). It is believed to be a key driver which contributes to an institution's growth and competitiveness because it fosters long-term provision of goods and services (Alliance for Sustainability Leadership in Education [EAUC], 2018). The Alliance further noted that sustainability is a key element in attracting and retaining talents, students and staff for the growth of educational institutions.

According to Gómezgutiérrez and Sepúlveda (2017), sustainability can be placed under three dimensions: financial, social and environmental. Bertotto et al. (2012) added that the financial (economic) dimension discusses how to mobilize and use resources for growth. The environmental dimension discusses nature and the idea of maintaining nature in its original state with a reduced human interference to enhance posterity's survival. The social dimension seeks the benefit of society from ecological preservation and effective resources mobilization and application. This study focuses on the financial resilience of educational institutions for sustainability.

Financial sustainability involves an institution's ability to diversify its revenue sources by recognizing and evaluating the totality of its cost to remain viable and continue to provide academic and other services, now and into the future (Afriyie, 2015). Institutions are expected to operate in a financial condition, which highlights a favorable income to expenditure ratio and efficient utilization of resources in operational activities within the standard weight of environmental factors (Koleda & Oganisjana, 2015).

According to Khan et al. (2017), financial sustainability is tied to financial self-sufficiency because it measures how well an organization earns from all internally generated revenue after covering all its expenditures for long term survival. It measures the ability of an organization to survive and grow as a result of its ability to envelop its cost with sufficient generated revenue from all available and strategically developed sources (Beg, 2016).

The financial health of an institution illustrates whether it will be able to perform its services and meet the needs of its stakeholders over time, calculated by the measurement of revenue surplus over expenditure, the availability of cash from various resource mobilization sources to cater for expenses to remain sustainable (Mugambi, 2016).

## 2. Creation of Fiscal Space and Financial Sustainability

Explicit links exist between creation of fiscal space through institutional ventures and institutional financial sustainability (Cheng & Pitterle, 2018). In an evaluation of income-generating projects in public secondary schools in Nairobi County, Nyamwega (2016) sampled 11 public second cycle institutions and found that the schools earned approximately KShs 6,000,000 (Kenya Shillings) per year from ventures, an indication that school-based ventures are profitable, which help the institutions to stay financially sustainable.

Amos and Koda (2018) studied the contribution of school-based income-generating activities in secondary schools managed by the Catholic Diocese of Moshi in Tanzania. The study sampled 252 respondents from 12 secondary schools operated by the Catholic Church. The study concluded that institutional ventures are an essential alternative means of generating additional income as they enable second cycle institutions to solve financial problems. The study listed crop farming, vegetable, and poultry farming as the significant ventures managed by the schools.

Adan and Keiyoro (2018) conducted a study on factors influencing the implementation of income-generating projects in public secondary schools in Isiolo, Kenya and found that institutional ventures enhance financial sustainability as it enables educational institutions to cope with the financial dynamics without necessarily, transferring budget overruns to parents and guardians.

In a study on income generation activities among academic staff at Malaysian public universities, Ahmed and Kim-Soon (2015) concluded that commercialization income contributed significantly towards school finances in Malaysia. The researchers recommended that institutions that seek financial sustainability should consider ventures as an added

revenue stream to boost additional income, which will eventually aid schools to attain the optimal results for growth and survival.

Ekpoh and Okpa (2017) looked at the diversification of sources of funding university education for sustainability, its challenges, and strategies for improvement. The study sampled 480 respondents from four federal universities in the South-South Region of Nigeria. Findings indicated that diversifying university income to include consultancy services, commercialization of physical facilities, part-time degree programs, proper financial management, and eliminating poor attitude of staff increased enrollment with its resultant positive effect on the financial sustainability of universities in the South-South region of Nigeria.

Osei-Kuffour and Peprah (2020) examined the correlate of income diversification and financial sustainability of 60 private tertiary institutions in the Greater Accra Region of Ghana. The study found a positive, significant correlation between income diversification and financial sustainability and concluded that private tertiary institutions need to diversify their income source to be sustained.

This study is anchored on the resource-based theory, which suggests that financial and non-financial resources such as inter-personal networks, income diversification strategies, institutional knowledge, among others, constitute valuable and unique properties that are key to the success of an institution (Andrews et al., 2015). This theory, which addresses income diversification through institutional ventures, concentrates on the role of institutional managers in providing additional resources that institutions need to be sustainable.

### Conceptual Framework

The variables in studying the influence of the creation of fiscal space on financial sustainability are as shown in Figure 1.

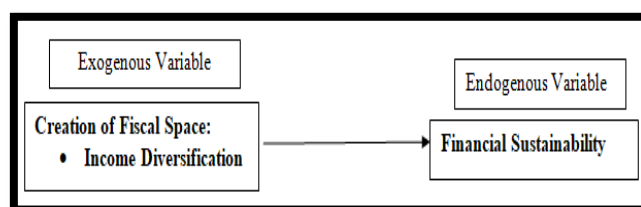


Figure 1

## 3. Methodology

### 3.1. Research Design

This study employed a descriptive correlational design that used computation of ratios and parametric inferential statistics to examine the influence of the creation of fiscal space on financial sustainability.

### 3.2. Population and Sampling Techniques

The study was conducted among 190 private second cycle educational institutions in Ghana, randomly selected from a population of 315

### 3.3. Instrumentation

The study used self-constructed questionnaire as the tool for collecting data from finance managers of the sampled units using a cross-sectional survey. The questionnaire used 5-point Likert Scale and Vagias (2006) response anchors. It consisted of structured closed-ended questions for ease of analysis. Creation of fiscal space and financial sustainability yielded Cronbach alpha of 0.710 and 0.751 respectively. In determining the strength of the influence of fiscal space creation on financial sustainability, Cohen (1998) absolute correlation values were used as shown in Table 1.

Unstandardized Coefficients	Interpretation	Verbal Interpretation
$\beta=0.10$ to $0.29$	Small	Low
$\beta=0.30$ to $0.49$	Medium	Moderate
$\beta=0.50$ to $1.00$	Large	High

Table 1: Interpretation Table for Beta

Note. This Table Shows The Effect Sizes and Interpretations of the Relationships Among Variables. Adapted from Statistical Power Analysis for the Behavioural Sciences (2<sup>nd</sup> Ed.), By J. Cohen, 1988, L. Erlbaum Associates

### 3.4. Analysis of Data

MS-Excel and IBM Statistical Package for Social Sciences (SPSS) were used to analyze the descriptive statistics. Pearson Product-Moment Correlation was used to determine the influence of fiscal space creation on financial sustainability.

### 3.5. Ethical Considerations

Ethical considerations were observed during the survey exercise. Participants were assured that the survey would not collect identifying information such as name, email address, or telephone numbers, which makes them and their data anonymous and confidential.

### 3.6. Results and Discussion

The study aimed to assess the role of creation of fiscal space on the financial sustainability of private second cycle educational institutions. The results are presented in this section

### 3.7. Level of Income Diversification to Create Fiscal Space

The study ascertained from the respondents the level of fiscal space creation through income diversification of private second cycle educational institutions. The findings, in terms of means and standard deviations, are as shown in Table 2. The levels of income diversification of private secondary schools were ( $M= 1.00$ ,  $SD= 0.04$ ), which was verbally interpreted as *very low*. On average, income from diversified sources was below 35% of the average total income. The lowest income diversification item identified by the respondents was income from ventures ( $M= 1.00$ ,  $SD= 0.00$ ), which was verbally interpreted as *very low*.

	Mean	Std. Dev.		Verbal Interpretation
Income from Ventures	1.00	0.00		Very Low
Income from Donors	1.01	0.12		Very Low
Income Diversification	1.00	0.04		Very Low

Table 2: Level of Income Diversification to Create Fiscal Space (190)

In a detailed analysis of the sources from which private second cycle educational institutions generate income, the study found that almost all the institutions, on average, generate approximately 96% of their income from tuition fees. Income from ventures and donations averaged 1%, and 3%, respectively, as shown in Figure 2.

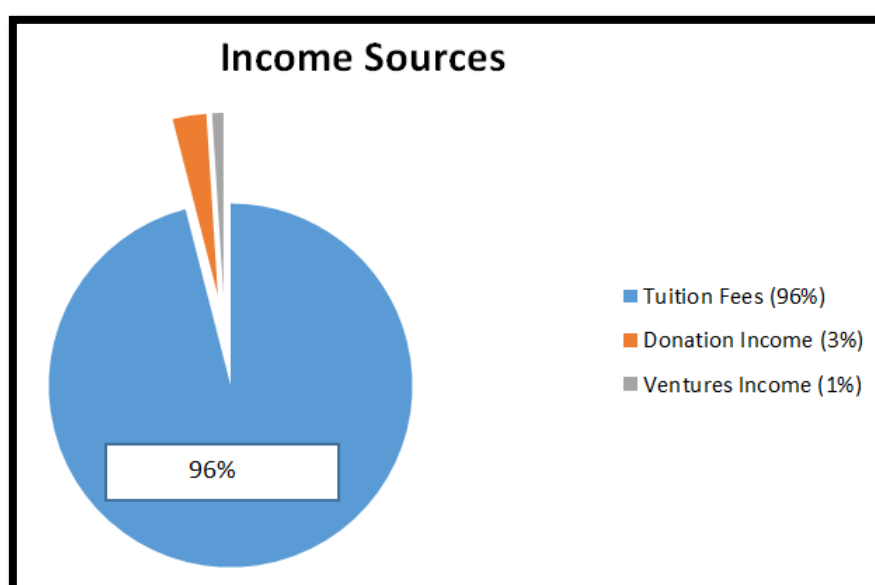


Figure 2: Distribution of Respondents Income Sources

The mean values of income diversification items were near 1 (very low). These results imply that creation of fiscal space through income diversification strategies is not highly considered as tactics to attain financial sustainability. The over-reliance on tuition fees relegates the admonition in the four pillars of financial sustainability concept, championed by León (2001), to the background.

### 3.8. Influence of Fiscal Space Creation on Financial Sustainability

The influence of the creation of fiscal space on financial sustainability was investigated using Pearson Correlation Coefficient. There was a *small positive, statistically significant influence* of fiscal space creation on financial sustainability ( $r = 0.106$ ,  $n = 190$ ,  $p=0.000$ ) as shown in Table 3.

Creation of Fiscal Space (Income Diversification)	Financial Sustainability	
	Pearson Correlation	.106
	Sig. (2-tailed)	.000
	N	190

Table 3: Influence of Fiscal Space Creation on Financial Sustainability

The results showed that creation of fiscal space through income diversification strategies influence financial sustainability of private second cycle educational institutions. The implication of the results for school administrators is apparent; the better the strategies to create fiscal space through income diversification, the better is the financial sustainability of private secondary schools. Income diversification plays a significant role in creating fiscal space for financial sustainability.

The findings are in tandem with previous studies which found that diversification strategies to create fiscal space such as ventures are essential alternative means of generating additional income to solve educational institutions' financial problems (Ekpoh & Okpa, 2017; Nyamewega, 2016; Amos & Koda, 2018; Adan & Keiyoro, 2018; Osei-Kuffour & Peprah, 2020). As a result, the study *rejects* the null hypothesis that *there is no significant influence of the creation of fiscal space on financial sustainability of PSCEIs*.

This study examined the role of income diversification in the creation of fiscal space for PSCEIs' financial sustainability. The analysis of the descriptive statistics, based on the respondent responses, showed that there were low levels of diversified income sources as a means of creating fiscal space for private schools' survival. Creation of fiscal space was found to influence the financial survival of private secondary schools. The study concludes that concerted efforts to create fiscal space through income diversification strategies enhance private secondary schools' financial sustainability.

Financial sustainability is vital to all businesses, and private secondary schools are no exception. In recognizing the severe predicament of these institutions and the need to, urgently, address the financial sustainability challenges confronting them, the study recommends that school administrators should step-up their efforts to include creation of fiscal space strategies in their strategic plan.

The study further recommends that creation of fiscal space through income diversification strategies such as institutional ventures (farming, bakery services, water production, blocks production, among others) should be considered by private second cycle educational institutions' managers, as extra sources of mobilizing revenue to supplement tuition fees for sustainability.

The findings of this study contribute to the existing body of knowledge that used statistical analysis to understand the influence of fiscal space creation on financial sustainability of educational institutions. This study considered income diversification as a key element in the creation of fiscal space for survival. Ultimately, this study enhances the achievement of the financial sustainability of private second cycle educational institutions. There is, however, the need for future qualitative research to explain critical findings. Institutional perspectives need to be shared.

This study faced some limitations. The major limitation was that data were gathered in a hybrid form: direct responses and online responses because data were gathered at the onset of the corona virus pandemic. According to Al-Salom (2017), participants in online data gathering may not contribute valid data, especially, in stressful life events such as the Covid-19 pandemic. This data gathering procedure might affect the validity of the facts provided by the respondents.

#### 4. References

- i. Adan, S.M., & Keiyoro, P. (2017). Factors influencing the implementation of income generating projects in public secondary schools in Isiolo North Sub County, Kenya. *International Academic Journal of Information Sciences and Project Management*, 2(1), 558-573. [http://www.iajournals.org/articles/iajisp\\_m\\_v2\\_i1\\_558-573.pdf](http://www.iajournals.org/articles/iajisp_m_v2_i1_558-573.pdf)
- ii. Afriyie, A.O. (2015). Financial Sustainability Factors of Higher Education Institutions: A predictive model. *International Journal of Education Learning and Development*, 2(3), 17-38. <http://www.eajournals.org>
- iii. Ahmed, R.A., & Kim-Soon, N. (2015). Income generation activities among academic staff at Malaysian public universities. <https://www.researchgate.net/publication/277881266>
- iv. Akwah, N.S. (2018, September 25). *Cape Coast's biggest private school crumbling as Free SHS, double track begins to bite*. <https://www.myjoyonline.com/news/2018/september-25th/cape-coasts-biggest-private-school-crumbling-as-free-shs-double-track-begins-to-bite.php>
- v. Almagtome, A., Shaker, A., Al-Fatlawi, Q., & Bekheet, H. (2019). The integration between financial sustainability and accountability in higher education institutions: An exploratory case study. *International Journal of Innovations, Creativity and Change*, 8(2), 202-221. <https://www.ijicc.net>
- vi. Al-Salom, P., & Miller, C.J. (2017). The Problem with Online Data Collection: Predicting invalid responding in undergraduate samples. *Modern Psychological Studies*, 22(2), 1-10. <https://www.scholar.utc.edu/cgi/viewcontent.cgi?article=1269&context=mps>
- vii. Amolo, J., & Migiro, S. O. (2017). Small business and entrepreneurial venture in an economic conundrum. *Problems and Perspectives in Management*, 15(1), 271-279. <https://www.businessperspectives.org/journals?task=callelement&format>
- viii. Amos, O., & Koda, G.M. (2018). Contribution of school-based income generating activities in quality education provision in secondary schools managed by the Catholic Diocese of Moshi, Tanzania. *British Journal of Education*, 6(4), 49-69. <http://www.eajournals.org/wp-content/uploads/Contribution-of-School-Based-Income-Generating-Activities-in-Quality-Education-Provision-in-Secondary-Schools-Managed-by-the-Catholic-Diocese-of-Moshi-Tanzania.pdf>
- ix. Andrews, R., Beynon, M.J., & McDermott, A.M. (2015). Organizational capability in the public sector: A configurational approach. *Journal of Public Administration Research Theory*, 1-51. [https://www.researchgate.net/publication/274710252\\_Organizational\\_Capability\\_in\\_the\\_Public\\_Sector\\_A\\_Configurational\\_Approach](https://www.researchgate.net/publication/274710252_Organizational_Capability_in_the_Public_Sector_A_Configurational_Approach)

- x. Ashley, L.D., Mcloughlin, C. Aslam, M., Engel, J., Wales, J., Rawal, S. Batley, R., Kingdon, G., Nicolai, S., & Rose, P. (2014). The role and impact of private schools in developing countries. <http://cme-espana.org/media/publicaciones/3/role%20of%20private%20shools%20DFID014.pdf>
- xi. Beg, K. (2016) Determinants of financial self-sufficiency of Andhra Pradesh microfinance institutions. *Journal of Business & Financial Affairs*, 5(3), 1-9. <https://www.omicsonline.org/open-access/determinants-of-financial-self-sufficiency-of-andhra-pradeshmicrofinance-institutions-2167-0234-1000209.php?aid=79825>
- xii. Bertotto, B.B., Pohlmann, M., & da Silva, F.P. (2014). The dimensions of sustainability: concepts and strategies in the textile and clothing supply chain in Brazil. *Journal of Innovation Impact*, pp.218-229. <https://nimbusvault.net/publication/koala/inimpact/papers/sdm14-029.pdf>
- xiii. Busby, E. (2019, March 8). *More schools could be forced to close early as funding crisis worsens, union warns*. <https://www.independent.co.uk/news/education/education-news/school-funding-cuts-austerity-education-parents-headteachers-union-a8814271.html>
- xiv. Cernostana, Z. (2017). *Financial sustainability for private higher education institutions*. [Paper presentation]. Ninth International Conference on Applied Economics Contemporary Issues in Economy, Toruń, Poland. <https://www.ideas.repec.org/p/pes/wpaper/2017no17.html>
- xv. Cesar, C., Punam, C., & Modeste, S.Y. (2018). Assessing Fiscal space in Sub-Saharan Africa. <https://openknowledge.worldbank.org/handle/10986/29602>
- xvi. Cheng, H.W.J., & Pitterle, I. (2018). Towards a more comprehensive assessment of fiscal space. <https://www.un.org/en/files/71389/download?token=CLYdjRQL>
- xvii. Citinews. (2019, May 2). *Free SHS: Over 100 private schools on the verge of collapse – Heads of schools*. <https://www.myjoyonline.com/news/2019/May-2nd/free-shs-over-100-private-schools-on-verge-of-collapse-heads-of-schools.php>
- xviii. Diep, H.T.N., & Vien, H.T. (2017). Determinants of income diversification and its effects on rural household income in Vietnam. *Can Tho University Journal of Science*, 6, 153-162. [https://www.researchgate.net/publication/319852283\\_Determinants\\_of\\_income\\_diversification\\_and\\_its\\_effects\\_on\\_rural\\_household\\_income\\_in\\_Vietnam](https://www.researchgate.net/publication/319852283_Determinants_of_income_diversification_and_its_effects_on_rural_household_income_in_Vietnam)
- xix. Demirbag, J.R. (2014). *The Financial Sustainability of Maui's Small Independent Schools*. (Doctoral dissertation, University of Hawaii, Manoa). [http://www.scholarspace.manoa.hawaii.edu/bitstream/10125/100525/1/Demirbag\\_Jocelyn\\_r.pdf](http://www.scholarspace.manoa.hawaii.edu/bitstream/10125/100525/1/Demirbag_Jocelyn_r.pdf)
- xx. Dogbey, S.A. (2020, April 28). *Ghana National Association of Private Schools pursue financial aid to pay salaries of teachers*. <https://www.myjoyonline.com>
- xxi. EAUC (2014). Sustainability: Key to long-term institutional success. [https://iau-hesd.net/sites/default/files/documents/a5\\_eauc\\_booklet\\_final.pdf](https://iau-hesd.net/sites/default/files/documents/a5_eauc_booklet_final.pdf)
- xxii. Ekpoh, U.I., & Okpa, O.E. (2017). Diversification of sources of funding university education for sustainability: Challenges and strategies for improvement. *Journal of Education, Society and Behavioural Science*, 21(2), 1-8. <https://www.doi.10.9734/JESBS/2017/34494>
- xxiii. Ferdinand, E. (2020, February 18). *Lack of funds forces 21 schools out of 2020 Math & Science Quiz*. <https://educationghana.net/index.php/2020/02/18/lack-of-funds-forces-21-schools-out-of-2020-math-science-quiz/>
- xxiv. Funtahun, G.E., Sani, S., & Kemaw, B. (2018). The role of income diversification on risk management and rural household food security in Ethiopia. *Journal of Economics and Sustainable Development*, 9(9), 15-24. <https://www.pdf.s.semanticscholar.org/13d3/4ad88ac558a68cb1b1fec30c544016ecf20.pdf>
- xxv. Gómezgutiérrez D., & Sepúlveda J.A.M. (2017). Sustainability Indicators for Universities: Revision for a Colombian case. *Global Journal of Researches in Engineering*, 17(5), pp. 2-11
- xxvi. Heller, P.S. (2006). The prospects of creating 'fiscal space' for the health sector. <https://watermark.silverchair.com/czj013.pdf?>
- xxvii. India Today. (2020). Over 87% budget private schools in India facing fee collection challenges: Survey. <https://indiatoday.in/education-today/latest-studies/story/87-budget-private-schools-facing-fee-collection-problems-1691019-2020-06-20>
- xxviii. Kharusi, S.A., & Murthy, S.R.Y (2018). Financial sustainability of private higher education institutions: The case of publicly traded educational institutions. *Investment Management and Financial Innovations*, 14(3), 25-38. [http://www.dx.doi.org/10.21511/imfi.14\(3\).2017.03](http://www.dx.doi.org/10.21511/imfi.14(3).2017.03)
- xxix. Kipkoech, C.S. (2018). Determinants of implementation of income generating projects in public secondary schools in Konoin District, Bomet County, Kenya. *Journal of Business and Management*, 20(3), 64-68. <https://www.iosrjournals.org>
- xxx. Kolenda, N., & Organisjana, K. (2015). Challenges in learning for company's financial viability assessment and management. *Verslas: Teorija ir prakTika/Business: Theory and Practice*, 16(2), 195-204. [https://www.researchgate.net/publication/281723329\\_Challenges\\_in\\_Learning\\_for\\_Company's\\_Financial\\_Viability\\_Assessment\\_and\\_Management](https://www.researchgate.net/publication/281723329_Challenges_in_Learning_for_Company's_Financial_Viability_Assessment_and_Management)
- xxxi. León, P. (2001). Four pillars of financial sustainability. <http://www.ve.vhjdvyz.vesrv.com/sites/default/files/documents/fundraising/four-pillars-financial-sustainability-tnc.pdf>
- xxxii. L'Souza, B. (2018). *Increased competition and income diversification for higher educational institutions*. [A presentation]. <https://www.icpak.com/wp-content/uploads/2018/05/Income-Diversification-for-Higher-Learning-by-CPA-Boniface-Lsouza.pdf>

- xxxiii. Miranda, T., Tenedero, L.E., Fiel-Miranda, J.L., & Celestino, E.R. (2016). The income-generating project of a government academic institution in the Philippines: The case of the University of Eastern Philippines. *Asia Pacific Journal of Innovation and Entrepreneurship*, 10(1), 5-16. <https://www.emeraldinsight.com/doi/full/10.1108/APJIE-12-2016-006>
- xxxiv. Molele, C., & Tefu, N. (2020, August 10). 60% of private schools risk closing down due to financial challenges, non-payment of school fees by parents. <https://insideeducation.co.za/2020/08/10/60-of-private-schools-risk-closing-down-due-to-financial-challenges-non-payment-of-school-fees-by-parents/>
- xxxv. Mugambi, M.D. (2016). *Donor funding practices and financial sustainability of donor aided projects in World Vision Kenya*. (Master's thesis, University of Nairobi). [http://www.erepository.uonbi.ac.ke/bitstream/handle/11295/97870/Miriti\\_Donor%20Funding%20Practices%20and%20Financial%20Sustainability%20of%20Donor%20](http://www.erepository.uonbi.ac.ke/bitstream/handle/11295/97870/Miriti_Donor%20Funding%20Practices%20and%20Financial%20Sustainability%20of%20Donor%20)
- xxxvi. Nyamwaga, H.N. (2016). An evaluation of income generating projects in public secondary schools in Nairobi County. *International Journal of African and Asian Studies*, 21, 6-16. <https://www.iiste.org>
- xxxvii. Oketch, M., Mutisya, M., Ngware, M., Ezeh, A.C. & Epari, C. (2010) 'Free Primary Education Policy and Pupil School Mobility in Urban Kenya'. *International Journal of Educational Research* 49(6), pp. 173-183
- xxxviii. Osei-Kuffour, F., Peprah, W. K. (2020). Correlate of income diversification and financial sustainability of private tertiary institutions as moderated by institutional profile. *International Journal of Academic Research in Accounting, Finance and Management Sciences* 10 (3): 10-19.
- xxxix. Parnham, C. (2018, January 9). Top 10 challenges faced by private schools. . <https://ie-today.co.uk/news/10-challenges-facing-independent-schools/>
- xl. Quartey, P. (2020). COVID-19 and the plight of private school teachers in Ghana. *Statistical, Social and Economic Research*. <https://www.isser.ug.edu.gh>
- xli. Senyo, D. B., Anku-Tsede, O., Musah, A., & Nuhu, E. (2015). Income diversification and financial stability of banks in Ghana. *International Journal of Business and Social Science*, 6(6), 177-184. [http://www.ijbssnet.com/journals/Vol\\_6\\_No\\_6\\_June\\_2015/15.pdf](http://www.ijbssnet.com/journals/Vol_6_No_6_June_2015/15.pdf)
- xlii. Terry, W. (2013). Organizational Sustainability: what is it, and why does it matter. *Review of Enterprise and Management Studies*, 1(1), pp.1-12. [https://uosa.ac.uk/sites/default/files/basic\\_file/REAMS\\_1-\(1\)\\_Wales-v2.pdf](https://uosa.ac.uk/sites/default/files/basic_file/REAMS_1-(1)_Wales-v2.pdf)
- xlili. Vagias, W. M. (2006). Likert-type scale response anchors. *Clemson International Institute for Tourism & Research Development, Department of Parks, Recreation and Tourism Management*. <http://www.media.clemson.edu/cbshs/prtm/research/resources-for-research-page-2/Vagias-Likert-Type-Scale-Response-Anchors.pdf>
- xliv. Wachira, R.N. (2018). *Financial sustainability determinants of Government Owned Entities in Kenya*. (Doctoral dissertation, Jomo Kenyatta University of Agriculture and Technology). [http://www.ir.jkuat.ac.ke/bitstream/handle/123456789/4840/Print%20Copy%20final%20thesis%20%20Rosaly%20N%20\\_ONedits.pdf?sequence=1&isAllowed=y](http://www.ir.jkuat.ac.ke/bitstream/handle/123456789/4840/Print%20Copy%20final%20thesis%20%20Rosaly%20N%20_ONedits.pdf?sequence=1&isAllowed=y)
- xlvi. Yanka, K. (2017). *Leadership for a changing public-private higher education landscape*. [Paper presentation]. International Association of Universities Conference, Accra, Ghana. <https://www.ug.edu.gh/sites/default/files/images/Address%20by%20Professor%20Kwesi%20Yankah%20%20-%20IAU%202017%20INTERNATIONAL%20CONFERENCE.pdf>