Own-Income Generation: A Pillar of Financial Sustainability in Institutions of Higher Learning

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Abstract
This chapter advocates for enough resources for efficiency and work ethic towards the achievement of the vision of a given university or any other institution of higher education. It therefore calls upon such institutions, be they public or otherwise, to institute strategies for diversifying sources of funding with the eventual objective of financial sustainability; and highlights on the principal ways through which an organisation may generate its own revenues In view of a potential solution to the existential problems, the chapter propagates for proper utilisation and hence reducing waste of the existing resources; since efficiency in operation implies reductions in the cost of production. Ultimately, the chapter calls for a departure from a system of interdependence on the government for most of the financial responsibility.

Keywords: Efficiency, Financial Sustainability, Public Universities, Own-income Generation

Introduction
Higher education institutions (HEIs) are generally under scrutiny in the public eye for operationalisation of diversified revenue generation strategies for financial sustainability. The traditional source of funding for HEIs have been the government and through subventions and tuition/ non-tuition fees paid by parents and students (Teferra, 2013; World Bank, 2010). However, Waweru & Abate (2013), like Altbach (2012) and Estermann & Pruvot (2011) envisage that public universities, rather than remaining limited to the public purse, should bridge the financing gap between allocations from the government and total financing needs by instituting strategies to diversify sources of funding with the eventual objective of financial sustainability. Such strategies would engender efficiency, which in turn presupposes, among others, incessant capacity of a given organisation to generate enough resources to work towards its vision. (Neema-Abooki & Kamanzi, 2018).

Most advocates of funding in HE recommend the passing of the fees burden to consumer students or their parents (Altbach, 2012). As Weber & Duderstadt (2016) postulate, perhaps

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more than all other constituencies, students and faculty bear the burden of decrease in state funding and increased privatisation of public HE. For students, the most tangible burden can be seen in the form of increased tuition costs. The coauthors further contend that the reduction in state support forced universities to increase tuition.

Oketch (2016) agrees with Organisation for Economic Co-operation and Development [OECD] (2015) that across the globe, in particular in developing African countries, student financial contributions or fees have the potential to constitute a large, predictable, income source, giving the university the ability to invest for the long term. Yet efforts should be made to bring in donations from the alumni, individuals, foundations, and charitable organisations. In Uganda, for instance, as Kasozi (2009) argues, this would perhaps narrow the financial gap of HE to the children of ordinary people. The income per capita of Uganda is currently $300-350. However, many ordinary people earn far less than this. Therefore, children of peasants who form majority of Uganda's population may not manage to pay full cost at a university.

World Bank (2010) observes that the scenario of passing fees burden to students has serious consequences including fall in enrolment. While this can be termed as "Politics of Fees", Kasozi (2009) observes that whereas in June 2005 the Uganda Parliament reversed Makerere University's proposed to hike tuition fees to align the latter with a reasonable percentage of unit costs, in November of the same year, students at the same university went on strike when the institution hiked examination fees from about 3,000 Uganda Shillings (US$2.00) to about a tune of 100,000 ($75.00).

Protesting against fees policies is somewhat a routine at institutions of higher learning. Attempts to raise fees are protested. A more recent case-in-point is "the Makerere University students on strike over 100% tuition policy" as reported in the Daily Monitor of Thursday, March 12, 2015. The scenario of protesting fees policy and attracting media attention worldwide, confirms the assertion of Kasozi (2015), quoted in Neema-Abooki & Kamanzi (2018), that students and parents, even those able to pay, were opposed to fees however much the cost of providing high-quality education escalates. And, growth in student numbers without matching growth in subsidy funding has therefore resulted in general underfunding of higher education, putting pressure on institutions to raise funds through fees and third-stream income for sustainability

A most recent way of raising funds for institutions of HE is trade in education with foreign sources. Many quality HEIs, and ultimately nations, are earning money from exporting education through a number of ways including cross-border channels. Cross-border education refers to the movement of students and academics, programmes, providers, curricula, research and other services across national or jurisdictional borders (OECD 2012). In many countries foreign students pay more than local ones, though the difference must not be too unattractive to potential applicants. As consumers of goods and services in the host country, foreign students increase the general incomes of host institutions and nations (UNESCO, 2016; 2011;

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OECD, 2014). This, in turn, could lead to more budgetary allocations to HEIs if the host country prioritizes HE as both a major engine of development and an export item.

In 2013, as OECD (2015) spells out, more than 4 million students were enrolled in tertiary education outside their country of citizenship. Countries that enlisted the largest proportion of international students as a percentage of their total tertiary enrolments were: Australia, Austria, Luxembourg, New Zealand, Switzerland and the United Kingdom. While students from Asia represented 53% of international students enrolled worldwide, China is currently the country with the largest numbers of citizens enrolled abroad, followed by India and Germany. The proportion of international students among total enrolments tends to be much larger at the most advanced levels of tertiary education. On average across OECD countries 24% of students enrolled in doctoral or equivalent programmes are international students, against an average of 9% in all levels of tertiary education. This chapter subscribes to the foregoing and advances that Uganda is probably the major exporter of HE in East Africa and the Great Lakes Region. Kenya is perhaps the number one exporter of tertiary students to Uganda, followed by Tanzania, Rwanda, Burundi and Democratic Republic of Congo (DRC). However, this movement of students can be curtailed by lack of quality despite the demand of the National Council for Higher Education (NCHE) that such students should have attained at least the minimum requirements for admission.

Income generation and income diversification in HEIs

Diversification of funding sources describes a number of activities that strive to reduce the dependence on a specific type of income and / or specific donor, and several other issues. HEIs have to make a decision as to whether they want to achieve this long-term goal potentially with minor self-financing activities or will also be open to consider starting significant income-generating activities (Cheptot, Iravo, Wamalwa, 2017; Estermann, & Pruvot, 2011; Estermann, & Bennetot, 2011). Pressure to maintain quality and competitive standing in the face of menacing resource constraints has become the primary challenge facing colleges and universities in both developed countries such as United States, and in Sub-Saharan African countries. Faced with limited tuition revenues and public subsidies, PHEIs institutions have increasingly entered into the aggressive pursuit of alternative revenue streams (Rohayati, Najdi, & Williamson, 2016; Teferra, 2015).

Income diversification, herein this chapter also referred to as, revenue diversification, is yet an important pillar of financial sustainability, as it embraces not only to internal income generation, but also to the number of income sources that provide the main funding. Even if an organisation has multiple donors, it remains extremely vulnerable if a large portion of the budget depends on only one of these. Any change in this donor's decision can induce a major crisis. At least 60% of the organization's overall budget must come from at least five different sources as Hearn (2015) and Johnstone (2013) testify.

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Revenue diversification therefore relates to the number of income sources that supplement the main source of funding. Rohayati et al. (2016) hold that HEIs are facing rapidly rising costs and limitations in governmental funding. Accordingly, HEIs need sustainable and diversified forms of funding to operate effectively and remain competitive. Thus, in their attempts to identify causes and initiatives, universities both private and public, have paid more attention for instance to philanthropic support. HEIs, be they private or public, are therefore increasingly challenged by cost pressures which, in the combined observations of Frølich, Schmidt, and Rosa (2010), have resulted in costs outrunning available revenues. Contemporary public universities are facing unprecedented challenges particularly in terms of matching revenue to escalating costs and accommodating increasing demands of quality to remain globally and nationally competitive. As a result, most of the state universities in the world are searching for ways to cut costs, enhance productivity, and develop alternate revenue sources (World Bank, 2010; Woodhall, 2007). Such a situation suggests income diversification in public HEIs, hence, funding mix that will enhance financial sustainability (Rohayati et al, 2016).

Financial sustainability in public (HEIs) is, besides income diversification, underpinned by other pillars, namely: Strategic planning, sound administration and finance, and own income generation (Bell, Masoak, & Zimmerman, 2010). While the rest of the named pillars have been treated in Neema-Abooki & Kamanzi, (2018)), this chapter, dwells on the fourth pillar, i.e. own income generation.

Own income generation

The adjective "income-generation" presupposes 'an investment or business activity that makes money' (Cambridge Online Dictionary, 2013). Own-income generation is therefore one way for an organisation to diversify its sources of revenue. This category includes all other ways in which an organisation may generate unrestricted income. Rohayati, Najdi, & Williamson (2016) assert that there were principal ways through which an organisation can generate its own revenues. These include: contributions to a trust or endowment fund, fundraising for institution operations, income generation through the sale of goods and services, intellectual property, and income generation through corporate alliances.

a) Contributions to a trust or endowment fund

HEIs are investing increasing resources in order to achieve favorable perceptions among their stakeholders who contribute endowments to the institutions. Endowment funds are gifts of money or income producing property to a public organisation, such as a university, for a specific purpose like research or scholarships. Generally, the endowed asset is kept intact and only the income generated by it is consumed. The sole intention of the endowment is to invest it, so that the total asset value will yield an inflation-adjusted principle amount, along with additional income for further investments and supplementary expenditure. Teferra (2015) does elucidate that establishment of endowments were not only for developing countries in Africa but in developed countries as well. For instance in Uganda, Kibaki Endowment Chair

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was launched on the 13th of February 2015. His (Kibaki's) 4.6 billion gift to Makerere University was a contribution for the multi-billion university library (The Star, 2015). Teffera (2015; 2013) explicates that endowment constitutes funds that are invested by the universities; the interest earned is available to spend on academic and other institutional programmes.

b) Fundraising for institution building or operations

Association of Fundraising Professionals [AFPA] (2003) refer to fundraising as 'the practice of securing assets and resources from various sources for support of an organization or a specific project' (AFP, 2003). This refers to requesting donations from those individuals, corporations, or agencies willing to make contributions in support of the institutional development of the organisation (Thelin & Trollinger, 2014; Frølich, Schmidt, & Rosa, 2010). Donations may be given in the form of helping the organisation to increase its income generation capacity for a specific period (Frølich, Schmidt, & Rosa, 2010). Such funds are usually provided to an organization when it starts up operations to allow it to achieve a degree of financial stability until such time as its project volume increases (Roy, 2016).

In the selfsame words of Speck (2010), "fundraising has become the sine qua non for all public universities" (p. 10). In other words, fundraising has been identified as an integral enterprise in HE. Over the past three decades many public HEIs have suffered reduced state appropriations such that colleges and universities are no longer state-supported but state assisted (Speck, 2010). Some schools, such as the University of Colorado, are state located and receive essentially no state support due to a "tax revolt" (Archibald & Feldman, 2006). In many institutions, raising tuition for increased funding is reaching a point of diminishing returns. Higher tuition costs will make it more difficult for some institutions to meet enrollment goals and other institutions are forced to reduce tuition to a much lower net price, which decreases revenue (Cheslock & Gianneschi, 2008). Thus, fundraising has become an expected responsibility of leaders, particularly those at public colleges and universities (Hodson, 2010). As Lambert (2015) pointed out, "rising enrollment and tuition, increasing costs and services, and decreasing state funding, have forced state-supported American colleges and universities to reconsider what it means to be public institutions" (p. 8).

The foregoing presupposed a quest for alternative ways and means of raising funds for sustainability of the institutions; and so this chapter invites public institutions to follow suit.

HEIs, private and public, are turning to private giving to meet budgetary demands (White 2013; 2011). Philanthropy is associated with the action of expressing love to humankind; and is often focused towards improving humanity rather than solely serving the needs of the poor (Rohayati, et al., 2016; Association for the Study of Higher Education [ASHE], (2011). In "The Philanthropy Outlook", (2016; 2017) a national philanthropic giving to education project was developed due to its substantial importance and presence in the American philanthropic sector. Philanthropy is critical in supporting higher education, private K-12

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schools, libraries, and other types of educational organizations. In 2014, the education sector accounted for 15% of contributions received by U.S. Charities, making it the second-largest recipient category of charitable contributions. The Philanthropy Outlook (2018; 2017) mentions that while donations are applied to three recipient subsectors – education, health, and public-society benefit – the education subsector has seen relatively large year-over-year gains in philanthropic giving in the last several years. For, billion-dollar university campaigns have been numerous and successful, for both public and private institutions. Observed heretofore is that the projections for giving to education for the years 2017 and 2018 were higher than the historical 10-year average rate of growth for giving of this type, but lower than the 25-year and 40-year historical annualized averages. Giving to education includes all cash and non-cash donations from itemizing and non-itemizing U.S. households to U.S. education charities, including institutions of higher education, private K-12 schools, vocational schools, libraries, educational research and policy, and many other types of organizations serving educational purposes.

Adjacently, Giving USA (2015), as cited in Kamanzi and Neema-Abooki (2018), observe that religion contributions were largest at 32% in 2014. In the context of giving to higher education, philanthropy is often earmarked towards institutions that provide the infrastructure to uplift individuals and are expected to deliver the means for instruction or other benefits of education. As government funding is limited and may reach the politically-acceptable maximum at some point in the near future, revenue enhancement is normally achieved by shifting a greater portion of costs to non-taxpayer sources.

A number of annual reports are available on philanthropic giving. In most cases, individuals are responsible for the majority of giving to colleges and universities. Of these, alumni are at the core of philanthropic support of education. Along with increased competition for funds and larger campaign goals, the HE fundraising sector has seen the growth of mega gifts from individual donors, beginning in the 1990s with the dot-com boom on the USA West Coast. For example, in 1999 the Bill and Melinda Gates Foundation gave $1billion in support of scholarships for African American, Latino, and Native American students. This donation is managed by the United Negro College Fund [UNCF] (Giving USA, 2011). Anecdotal evidence holds that HEIs in native Africa have not or have done very little in tapping from the reservoirs of their alumni. This chapter castigates such a loophole.

c) Income generation through the sale of goods and services

Public HEIs offer products or services as an income-generating strategy. This type of initiative exists in many forms. It can be as simple as the sale of promotional products (t-shirts, posters, or other products with the organization's logo), or as complex as offering professional consulting services in a particular field in areas of technical expertise (Rohayati, 2016). Universities can deliberately employ financially needy students in these projects in lieu of fees payment (Mamo, 2015; Gebreyes, 2010). Some of the projects may include: short vocational courses, contract research for industries, consultancies, short-term training courses,

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instructional courses for enterprises and individuals. Postgraduate students could earn money by teaching and doing research in the universities where they are registered. Through their faculties, students could also be apprenticed to firms and industries (Gebreyes, 2010).

Sales and services are revenues received by organisational units for goods and services, such as university housing and food services, university fees, other sales and services. It is a common practice in local revenue generation to rent university premises during holidays. This chapter highlights that classrooms, residence halls, recreational areas, and undeveloped land, are assets that may ideally provide additional revenue for institutions. The foregoing does not in the least exhaust the bone of contention; for, Baitov and Grin (2014) also mention income generation through "financial management" which this chapter treats under f) below.

d) Intellectual property

Intellectual property (IP) is a category of property that includes intangible creations of the human intellect, and primarily encompasses copyrights, patents and trademarks (Sullivan, 2015, cited in Kamanzi and Neema-Abooki (2018). Intellectual property in its broadest form is the manifestation of ideas, creativity and invention in a tangible form. Care must be taken not to take too narrow a view. Many researchers make the assumption that intellectual property means primarily patents and therefore, it is of no direct relevance to them. Copyright is relevant to all university academic staff and students; copyright is in research results and in the tools and materials used for teaching (Wellings, 2008). It also includes other types of rights, such as trade secrets, publicity rights, moral rights, and rights against unfair competition.

Intellectual property as a source of income in HE may be in form of "knowledge exchange" involving a range of activities that universities undertake to engage with the business community and the wider public – such as research collaborations, research carried out under contract, consultancy arrangements, student placements, sharing of physical resources, and community events (Baker, Jayadev & Stiglitz, 2017 and Financier Worldwide Magazine, 2014). "Commercialisation" in particular results when university IP is used to create products and services for the general market (Wellings, 2008), it includes royalties or license fees, spin-out or IP license, all of which generate income to an institution (Debackere & Veugelers, 2005). Casper (2013) and Link, Scott, & Siegel, (2003) postulate that in recent years, there has been a substantial rise in the rate of commercialization of university-based technologies — through patenting, licensing, research joint ventures, and the formation of startup companies. Victoria (2017) cites an example of IBM Corporation that maintains one of the world's most vigorous patent filing operations, and actively licenses its 40,000-plus active patents to other companies. Although other corporations around the world may manufacture products based on IBM IP, the latter holds the original patent, and accordingly makes money without incurring additional expenditures or risks.

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There are a range of different public sector funders involved in financing research, which are crucial to the creation of IP that can ultimately be commercialised (Perkmann, Tartari, McKelvey, Autio, Broström, D'Este, & Krabel, 2013). They include Research Councils and other government agencies (where each have their own conditions for funding). Some basic research is supported by businesses and in some cases, this may be incentivized by a collaborative research grant with the public sector (Perkmann et al., 2013). A key factor, however, in funding commercialisation can be the regional economy and the availability of investors/ funds to support research and subsequent commercialisation – this is external investment, although it can be incentivized by government through co-investment or, indirectly, through tax incentives (Baker, et al., 2017; Rasmussen, Moen, & Gulbrandsen, 2006).

e) Income generation through corporate alliances

Income generation through corporate alliances are forms of income received through cause-related marketing. These alliances can be defined as the commercial activities where non-profit institutions partner with corporations to market an image, product, or service with the purpose of obtaining a mutual benefit (Leon, 2001). The corporation achieves a good public image, sells more products or services and the institution raises funds to carry out its mission. Sometimes funds received are a percentage of sales; in other instances, they might be a specific amount; and other times the institution receives a combination of both (Tartari & Breschi, 2012, in Kamanzi and Neema-Abooki, 2018). Partners may provide the strategic alliance with resources such as products, distribution channels, manufacturing capability, project funding, capital equipment, knowledge, expertise, or intellectual property.

The alliance aims for a synergy where each partner hopes that the benefits from the alliance will be greater than those from individual efforts. University funding has received a lot of attention in recent years, in partnership with the business sector. In the year 2014–2015, universities in the UK reportedly generated large cash reserves from the public sector. While universities received 66% direct from government, business sector contributed 20% for knowledge exchange and 4% for research and 13% came from charities. According to the University of Oxford Financial Statements 2015/16, the largest source of income was research grants and contracts from business sector which represented the universities' 40.7% of the total income. They also acquired the 12 millionth book by Percy Bysshe Shelley Company.

Public universities in Uganda, in particular Makerere, do thrive on International Development Agencies which fund the institution including; World Bank, through USAID, Norwegian Agency for Development Cooperation (NORAD), Swedish International Development Cooperation Agency/Department for Research Cooperation (SIDA/SAREC), German Academic Exchange Service(DAAD), the Carnegie Corporation of New York. Meanwhile, private foundations that fund philanthropy, include agencies organized in the Partnerships for Higher Education in Africa (PHEA) such as: Bill and Melinda Gates Foundation, the Rockefeller Foundation, the Belgian Technical Corporation, the Norwegian Government,

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Ford Foundation, the John D. and Catherine T. MacArthur Foundation, Kresge Foundation, NUFFIC, JICA, Celtel, Bank of Uganda, MTN, and Shell Uganda (World Bank, 2015; NCHE, 2016; UVCF, 2012; Kasozi, 2009). However, the institution is expected to develop proposals seeking support of various project activities (Hauptman, 2009).

f) Income Generation through financial management

Financial management is the use of financial information, skills and methods to make the best use of an organization's resources (Baitov, & Grin, 2014). Finance is a major resource for an organisation, without which it cannot operate and so the resource should be given the attention it deserves for an organization to survive. Income generation through financial management is therefore a technique that can be implemented by all institutions, regardless of whether it generates little, or lots of income. This category refers to the appropriate, strategic management of an organization's assets (assets may be bank accounts, property, etc.) in order to maximize their financial potential (Leon, 2001). For instance, property that is not being used may be rented, bank accounts can be transferred to interest-bearing accounts until the funds are needed, or unused assets which retain some market value can be sold. Hence, financial management is an essential part of the economic and non- economic activities which leads to decide the efficient procurement and utilization of finance in a profitable manner.

The most popular and acceptable definition of financial management is that it deals with procurement of funds and their effective/ efficient utilization in business (Paramasivan & Subramaniam, 2009). Financial activities are to be planned for, recorded, monitored and controlled for sustainability. Financial management is a vital activity in any organization. The term typically applies to an organisation or company's financial strategy. It includes how to raise capital and how to allocate it (Cleverism, 2015 and Paramasivan & Subramaniam, 2009). It is the process of planning, organizing, controlling and monitoring financial resources with a view to achieve organizational goals and objectives. Finance manager has not only to plan, procure and utilize the funds but s/he also has to exercise control over finances. This can be done through many techniques like ratio analysis, financial forecasting, cost and profit control, etc. In many cases, a financial project manager plays a key role in developing the long-term financial goals of a company or organization to ensure a profitable future for the firm (Leon, 2001).

Adequate financial management is an overarching strategy in generating income for the organisation. To get the most out of financial resources and achieve sustainability an organization needs to successfully manage all funding and financing sources (Paramasivan & Subramaniam, 2009).

The Makerere University Visitation Committee (2016) and earlier Committees like McGregor, 2007) established that public universities manage income from a number of different funding and finance sources - from donations, grants, contracts and income generated from trading. This chapter enunciates that there was yet another similar visitation in

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2014 known as the Omaswa Committee suggested heretofore is that a financial strategy is needed to enable the institutions manage financial needs and the sources of support required to meet an institution's objectives and fulfill its mission, whilst also planning to continue the growth to enable stability.

Lucianelli & Citro, (2017), also quoted in Kamanzi and Neema-Abooki. (2018), rule that sound financial management in public universities is a key issue for successful financial sustainability; only those institutions that have sound financial structures and stable income flows will be able to fulfill their multiple missions and respond to the current challenges in an increasingly complex and global environment.

Conclusion: A potential solution to the challenge

This chapter resonates with Hauptman (2007) in search for efficiencies in the delivery of education and services and in view of closing the gap between enrolment and resource projections. The call is as simple as using the existing resources more efficiently and reducing waste of resources.

Efficiency in operation implies reductions in the cost of production (Armstrong & Stephen, 2014; Armstrong, 2012). A focus on efficiency leads to attention to staff-student ratios, to student repetition and dropout rates, and to outsourcing non-academic services such as security, maintenance, and grounds keeping. Trends towards this have no doubt been observed in many Sub-Saharan African universities. For example, inefficient staff/student ratios (OECD, 2016; 2014; World Bank, 2010) have largely increased as the result of surging enrolments combined with staff recruitment and retention difficulties. In fact, overcrowding has frequently replaced under-utilization as a major management challenge on many campuses.

Cost sharing as a means attracting additional resources that enable further expansion of HE in Africa is perceived as another potential solution for overcoming financial challenges. Growing demand for HE, coupled with scarce public resources, has driven many governments to require students and their families to contribute to the costs of HE.

This chapter subscribes to the foregoing and confirms with Dunga (2013), Teferra (2013), UNESCO (2011) and Woodhall (2007) that private contributions improve efficiency in HE. Further, the chapter underlines that the introduction of market forces, encourages students to make better study choices and makes HE organisations more responsive to students' demands (Teferra, 2013; World Bank, 2010). With Johnstone (2004) and World Bank (2004), it propagates for a reconsideration for a departure from a system in which the government bears all or most of the financial responsibility.

References

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1. Altbach, P. (2012), African Higher Education Challenges: Economics and Research. https://www.insidehighered.com/blogs/world-view/african-higher-educationchallenges-economics-and-research. Accessed 20/01/2018
2. Archibald, R. B., & Feldman, D. H. (2006). State higher education spending and the tax revolt. The Journal of Higher Education, 77(4), 618-644.
3. Armstrong, M. & Stephen T. (2014). A hand book of human resource management practice. 13th ed London, United Kingdom: Kogan Page Limited. www.koganpage.com.
4. Armstrong M. (2012). A handbook of human resource management.–12th ed. London, United Kingdom: Kogan Page Limited. www.koganpage.com.
5. Association of Fundraising Professionals (2003). AFP fundraising dictionary Association for the Study of Higher Education (ASHE) (2011). The influence of philanthropy on American higher education. ASHE Higher Education Report.
6. Baitov, A., and A. Grin. 2014. Analysis of Financial Sustainability of Public Higher Educational Establishments. Siberian Financial School Journal. http://safbd.ru/.
7. Baker, D., Jayadev, A., & Stiglitz, J. (2017). Innovation, Intellectual Property, and Development.
8. Bell, J., Masaoka, J., & Zimmerman, S. (2010). Nonprofit sustainability: Making strategic decisions for financial viability. John Wiley & Sons.
9. Cambridge Online Dictionary (2013). Income-generating. Retrieved From http://dictionary.cambridge.org/dictionary/business-english/income-generating. Accessed 25/05/2018
10. Casper, S. (2013). The spill-over theory reversed: The impact of regional economies on the commercialization of university science. Research Policy, 42(8), 1313-1324
11. Cheptot, A., Iravo M, & Wamalwa R, (2017). Financial Sustainability of Community Based Organizations' in Mt. Elgon Sub-County, Kenya International Journal of Management and Commerce Innovations ISSN 2348-7585 (Online) Vol. 4, Issue 2, pp: (395-402), Month: October 2016 - March 2017, Available at: www.researchpublish.com Accessed 03/06/2018
12. Cheslock, J. J., & Gianneschi, M. (2008). Replacing state appropriations with alternative revenue sources: The case of voluntary support. Journal of Higher Education, 79(2), 208-229.
13. Cleverism. (2015). Working Capital Management: Everything You Need to Know. [Online] Available at https://www.cleverism.com/working-capital-management-everything-needknow. Accessed 04/06/2018
14. Daily Monitor (2015). Thursday, March 12
15. Debackere, K., & Veugelers, R. (2005). The role of academic technology transfer organizations in improving industry science links. Research Policy,
16. Dunga, S. (2013), Financing Higher Education in Malawi: Prospects, Challenges and Opportunities, (in: D. Teferra ed., Funding Higher Education in Sub-Saharan Africa,), New York: Palgrave Macmillan, pp.184-213.

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17. Estermann, T., & Pruvot, E. R. (2011). Financially sustainable universities II: European universities diversifying income streams. Brussels: European University Association.
18. Financier Worldwide Magazine, (2014).Generating revenue streams: putting your intellectual property assets to work; Available on line https://www.financierworldwide.com/generating-revenue-streams
19. Frølich, N., Schmidt, E. K., & Rosa, M. J. (2010). Funding systems for higher education and their impacts on institutional strategies and academia: A comparative perspective. International Journal of Educational Management, 24(1), 7-21. http://dx.doi.org/10.1108/09513541011013015. Accessed 15/06/2018
20. Gebreyes, F. M. (2010). Revenue Generation Strategies in Subsaharan African Universities.
21. Giving USA, (2011). The Annual Report on Philanthropy for the Year 2010.
22. Hauptman, A. M. (2007). Higher education finance: trends and issues. In International handbook of higher education (pp. 83-106). Springer, Dordrecht.
23. Hearn James C, (2015). RevenueDiversification in Public Higher Education-Open Access Journals. Available on line. https://ejournals.bc.edu/ojs/index.php/ihe/article/download/7413/6610. Accessed 05/06/2018
24. Johnstone D. B. (2013). Financing Higher Education: Worldwide Perspectives and Lessons.gse.buffalo.edu/.../inthigheredfinance/.../FinancingHigherEducation_WorldwidePersp
25. Johnstone, Bruce (2010), Financing Higher Education: Who Pays and Other Issues. http://gse.buffalo.edu/org/IntHigherEdFinance/files/Publications/foundation_papers/(2009)_Financing_Higher_Education.pdf . Accessed 10/09/2017
26. Johnstone, B. (2010). Financing higher education: Who pays and other issues. Education (Baltimore: Johns Hopkins University Press, 2001), 144, 80.
27. Johnstone, D. B. (2004). The economics and politics of cost sharing in higher education: comparative perspectives. Economics of education review, 23(4), 403-410.
28. Kamanzi Neema –Abooki (2018). Financing higher education: Income generation in Ugandan public universities. A Paper Presented at the 1st WCCES Symposium in conjunction with the 5th IOCES International Conference, University of Johannesburg, 21-22 June, 2018. Submitted to Submitted to the Journal of Public Administration
29. Kasozi.A.B.K. K (2015). The Politics of Fees in Uganda A. B. K. Kasozi: Available on line. https://ejournals.bc.edu/ojs/index.php/ihe/article/download/7890/7041 Accessed 30th.May,2017
30. Kasozi, A. B. K. (2009). Financing Uganda's Public Universities: An obstacle to serving the public good. Fountain Publishers.
31. Lambert, M. T. (2015). Privatization and the public good. Change: The Magazine of Higher Learning, 47(3), 6-13.doi:10.1080/00091383.2015.1031589.

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32. León, P. (2001). Four pillars of financial sustainability. Nature Conservancy. Link, Scott 2003
33. Makerere University Visitation Committee, (2016). Visitation Committee Report on Public Universities in Uganda. Kampala.
34. Mamo, F.G. (2015). Revenue generation strategies in Sub-Saharan African universities. PhD Thesis, University of Twente, Netherlands.
35. McGregor Report Visitation Committee (2007). A Visitation Committee Report on Public Universities in Uganda. Kampala.
36. NCHE (2016). The state of higher education and training in Uganda.
37. Neema-Abooki & Kamanzi, S.M. (2018). Financial Sustainability: Synergy in Revenue Generation for Public Universities. A Paper Presented at the First Postdoctoral Research Fellows' Annual Forum, University of Johannesburg, 20 November 2018.
38. Organisation for Economic Co-operation and Development (OECD), (2016), Education at a Glance 2016: OECD Indicators, OECD Publishing, Paris. http://dx.doi.org/10.187/eag-2016-en. Accessed 20/04/208
39. OECD (2015), Education at a Glance 2015: OECD Indicators, OECD Publishing. http://dx.doi.org/10.1787/eag-2015-en Organisation for Economic Co-Operation And Development (OECD) Annual Report(,2002). OECD, 2002 Available: https://www.oecd.org/about/2080175.pdf Accessed 07/06/2018
40. OECD (2014), "Indicator C3: How many students are expected to enter tertiary education?", in Education at a Glance 2014: OECD indicators.http://dx.doi.org/10.1787/888933118485
41. OECD (2012). Guidelines for quality provision in cross-border higher education: where do we stand? OECD 2012
42. Oketch, M. (2016). Financing higher education in sub-Saharan Africa: some reflections and implications for sustainable development. Higher Education, 72(4), 525-539.
43. Paramasivan, C. and Subramanian, T. (2009). Financial management (pp. 76). New Delhi: New Age International (P) Ltd., Publishers.
44. Perkmann, M., Tartari, V., McKelvey, M., Autio, E., Broström, A., D'Este, P. & Krabel, S. (2013). Academic engagement and commercialisation: A review of the literature on university–industry relations. Research policy, 42(2), 423-442.
45. Rasmussen, E., Moen, Ø., & Gulbrandsen, M. (2006). Initiatives to promote commercialization of university knowledge. Technovation, 26(4), 518-533.
46. Rohayati, M. I., Najdi, Y., & Williamson, J. C. (2016). Philanthropic fundraising of higher education institutions: A review of the Malaysian and Australian perspectives. Sustainability, 8(6), 541.
47. Roy Y. C. (2016) Studying Philanthropy and Fundraising in the Field of Higher Education: A Proposed Conceptual Model. Available on line at https://scholar.harvard.edu/.../studying_philanthropy_fundraising_higher_education.p. : DOI: 10.4018/978-1-4666-9664-8.ch001. Accessed 30/03/2018

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48. Speck, B. W. (2010). The growing role of private giving in financing the modern university. New Directions for Higher Education, 2010(149), 7-16.
49. Teferra, D. (2013). Introduction. In D. Teferra (Ed.), Funding higher education in Sub-Sahara Africa (pp. 1-12). London: Palgrave Macmillan.
50. Teferra D. (2015). Establishing Endowments for African Universities—Strategies for Implementation: International journal for higher education in Africa. Available on line at https://ejournals.bc.edu/ojs/index.php/ihe/article/download/7451/6648. Accessed 08/06/2018
51. The Philanthropy Outlook (2016 & 2017). Researched and written b y Marts & Lundy; Indiana University Lilly Family School of Philanthropy January 2016. Available on line: floridacommunity.com/the-philanthropy-outlook-2016-2017
52. The Philanthropy Outlook (2017 & 2018). Report Researched and Written by Marts & Lundy; Indiana University Lilly Family School of Philanthropy January 2017.Available on line: philanthropyoutlook.com/wp-content/.../2017/.../Philanthropy_Outlook_2017_2018.
53. Thelin, J. R., & Trollinger, R. W. (2014?). Philanthropy and American higher education. New York, NY: Palgrave Macmillan. Doi: 10.1057/9781137318589.
54. The Star. (www.the-star.co.ke)
55. United Nations Educational, Scientific and Cultural Organization (UNESCO),(2011), Financing Higher Education in Sub-Saharan Africa: Meeting the Challenges of Expansion, Equity and Quality, Paris: UNESCO.
56. UVCF (2016). Uganda Vice Chancellors' Forum Bulletin, Volume 5. Kampala.
57. UNESCO (2016) guidelines on "Quality provision in cross-border higher education: Available on line at: http://www.oecd.org/edu/skills-beyond--chool/unescooecdguidelinesonqualityprovisionincross-borderhighereducation.htm Accessed 07/05/2018
58. UNESCO (United Nations Educational, Scientific and Cultural Organization) (2011), Financing Higher Education in Sub-Saharan Africa: Meeting the Challenges of Expansion, Equity and Quality, Paris: UNESCO.
59. Victoria C. (2017) Intellectual Property: A Revenue Stream that Keeps on Streaming https://www.experience.com › Careers › Ideas.
60. Waweru, K. M., & Abate, S. (2013). Revenue Diversification and Resource Utilisation in Ethiopian Universities. In Funding Higher Education in Sub-Saharan Africa (pp. 71-97). Palgrave Macmillan, London
61. Weber, L., & Duderstadt, J. J. (2016). University priorities and constraints. Glion Colloquium.
62. Wellings, Paul (2008). Intellectual Property and Research Benefits 30 September 2008. Lancaster University.
63. White, F. L. (2011). Creating effective board–CEO relationships and fundraising to achieve successful student outcomes. New Directions for Community Colleges, 2011(156), 23-29.

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64. White, M.A., 2013. Sustainability: I know it when I see it. Ecol. Econ. 86, 213e217. http://dx.doi.org/10.1016/j.ecolecon.2012.12.020.
65. Woodhall, M. (2007). Funding higher education: The contribution of economic thinking to debate and policy development. World Bank.
66. World Bank (2010). Financing higher education in Africa. Washington, DC: World Bank. 2016
67. World Bank (2004). Higher Education Development for Ethiopia: Pursuing the Vision.
Washington, DC: World Bank, Human Development Department, Africa Region.
68. Yemer M. (2017). Internal Controlling System, Revenue Diversification Strategies and Internal
Revenue Generation of Public Universities: Theoretical and Empirical Article Review. Research Journal of Finance and Accounting.Vol.8, No.11, 2017. (Online) at www.iiste.orgwww.universities uk.ac.uk. July 2016.

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