Financing primary and secondary education in sub-Saharan Africa: A systematic review of literature

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In this paper, we review literature on the financing of primary and secondary education in sub-Saharan Africa (SSA) with a view to contributing some insights about the extent to which the region can achieve the United Nations’ (UN) Sustainable Development Goal 4 (SDG 4). At the heart of SDG 4 of the UN 2030 Agenda is the desire to achieve equity in education provision to the extent that no one is left behind. Leaving no one behind in this context suggests a pro-poor approach to educational financing. The SSA region lags behind other developing regions regarding investing in education and is, therefore, under threat of failing to meet the very ambitious aims of SDG 4, hence this focus. We examine the literature through a three-pronged conceptual framework, including public, external aid, and private education financing. Findings show that, ceteris paribus, SSA will not have adequate financial resources to meet SDG 4 requirements. Public education financing, which remains the major source, needs to increase significantly. For this to happen, SSA countries’ economies must necessarily grow.

Keywords: education financing; external aid; primary and secondary education; private financing; public financing; sub-Saharan Africa; Sustainable Development Goal 4

Introduction

In its vision statement (Item 8), the UN 2030 Agenda for Sustainable Development envisages [a] world which invests in its children and in which every child grows up free from violence and exploitation. A world in which every woman and girl enjoys full gender equality and all legal, social and economic barriers to their empowerment have been removed. A just, equitable, tolerant, open and socially inclusive world in which the needs of the most vulnerable are met. (UN, 2015:4)

In its preamble, the same document states:

… We are resolved to free the human race from the tyranny of poverty and want to heal and secure our planet. We are determined to take the bold and transformative steps which are urgently needed to shift the world onto a sustainable and resilient path. As we embark on this collective journey, we pledge that no one will be left behind. (UN, 2015:1)

This encouraging but ambitious agenda by the UN points to the desire to improve, in a sustainable way, the lives and livelihoods of all of us in the world and in particular, the currently marginalised, including women and children. As Walker, Pearce, Boe and Lawson (2019) argue, basic education (primary education in this context) is one of the most important means by which poor tackle and address the growing inequalities and generate dignified lives for their citizens. These authors further posit that this could be possible if education is equitable, free and adequately funded (Walker et al., 2019). Therefore, such education should be an essential part of any development agenda aimed at people development. This would form part of what a “… world which invests in its children …” entails. In this connection, the UN Agenda for SDG 4 commits to seeking to provide inclusive and equitable education at all levels, so that by 2030 all girls and boys complete free, equitable and quality primary and secondary education, and that all learners acquire the knowledge and skills required to promote sustainable development (UN, 2015).

At this time when the international community should be busy at achieving SDG 4, the global number of children and young adults out of school is instead rising (United Nations Educational, Scientific and Cultural Organization [UNESCO] Institute for Statistics [UIS], 2015). In SSA in 2014, 93.3 million children of primary and secondary education were out of school (UNESCO UIS, 2016). This constituted a massive 36% of out-of-school children worldwide (UNESCO UIS, 2016). In this region, 34.8 million, constituting 58% of all youths between the ages of about 15 and 17, were out of school. In the UNESCO-UIS Blog, Montoya and Benavot (2016) cite the Director-General of UNESCO who said that the main reason for many adolescents being out of school was that they did not start primary education. They further report that only 65 of the poorest children for every 100 of the richest attend primary school in SSA. Hence, failure to prioritise primary education has a great effect on dwindling school enrolments in secondary education.

Poverty is one of the most important factors bedevilling the provision of education in the developing world in general and in SSA in particular, thus poses a massive challenge in the pursuit of meeting SDG 4 targets (Lewin, 2009; see also Lewin & Akyeampong, 2009; Nudzor, 2015; Somerset, 2009; Tilak, 2009). For example, SSA has the highest teacher-pupil ratio (average 1:45) of all regions of the world, as opposed to the world average of 1:25 and 1:14 in some developed countries (Tilak, 2009). Thus, achieving equity, which is at the heart of SDG 4, is under severe pressure in the SSA region. While there has been significant progress in the
education sector since the adoption of the Dakar Framework in 2000, inequity remains a key issue negatively affecting the marginalised. Education systems have to confront, head-on, the needs of the most disadvantaged (Dalrymple, 2016). The situation is dire given that international aid to education is declining. Between 2010 and 2012, such aid for basic education declined by 15%. It is projected that there will be a shortfall of 42% in meeting the total annual cost of pre-primary, primary and secondary education by 2030 (UNESCO, 2015). Given these financial challenges, there are doubts and concerns regarding the ability of the region to meet SDG 4 goals, particularly regarding meeting the needs of the disadvantaged (Dalrymple, 2016).

Of all regions of the world, SSA is the most disadvantaged. The issue of education financing is at the centre of the world’s success or failure to achieve SDG 4. There is a precedent of failure to achieve SDGs, given that the promise made to children in 2000, that by 2015 they would all be able to complete primary schooling, has been broken (UNESCO UIS, 2015). Little is available in the literature by way of composite evidence regarding education financing in SSA. Against this background, in this paper, we review literature about the financing of primary and secondary education in that region. Through the review, we sought to address the following critical questions:

1) What is the nature of the financing of primary and secondary education in the SSA region? By the term “nature of the financing”, we refer to the following: (i) the forms of financing and (ii) what the trends are regarding the strength of each form compared to the others.

2) What lessons can we draw from the financing of primary and secondary education in the region regarding the way forward towards achieving SDG 4?

In simple terms, the case for investing in education is that for decades, education has had a positive impact on the Gross Domestic Product (GDP) per capita, on individual earnings, and on poverty reduction (United Nations Children’s Fund [UNICEF], 2015).

Conceptual Framework
We conceptualise the financing of primary and secondary education in the SSA region to take the following forms:

1) Public education financing. This refers to government funding of education, largely through revenue from taxes. In almost every country, this will remain the dominant source of funding in public schools, addressing recurrent expenditure, among others.

2) External aid education financing. This is funding from organisations outside the SSA countries in question, usually to address non-recurrent expenditure. External aid is likely to continue to contribute a portion of education financing in the region, given the weak and fragile nature of most of the countries in the region. This funding is unstable. As we have earlier indicated, trends suggest that such aid is dwindling.

3) Private education financing. This is funding by households, philanthropists and various public-private partnerships within a country. Such funding is likely to depend on, among other factors, the growth, or lack thereof, of the economy of the country. Therefore, the level of funding dedicated to education in a given country is a function of the three forms of funding.

Method
Systematic reviews serve one or more of the following purposes: describe, test, extend, and critique (Xiao & Watson, 2019). In seeking to describe the literature, that is, provide an account of the state of the literature, we adopted a hybrid comprising of topographical and narrative review (Hallinger, 2013; Hallinger & Bryant, 2013; Xiao & Watson, 2019). It was topographical in that we sought to determine the dominant features of the literature. In this case, we sought to establish the dominant patterns of financing primary and secondary education in SSA. It was narrative in that we sought evidence that would provide both context and substance to our cause. We focused on the patterns of education financing, with the aim of providing knowledge towards evidence-informed decision-making (Stewart, 2014).

Identifying Sources
Initially, we sought to target only published journal articles. This was in keeping with scholars’ assertion that reviews that focus on such sources meet more quality standards than those that adopt mixed sources (Gough, 2007; Hallinger & Bryant, 2013). After an initial search, we found 23 articles about South Africa alone and a few on other individual countries in SSA. At that point, we resolved that, in as much as such literature would provide a wealth of rich data, this was not our focus and we were unable to sustain such volumes of data to cover all 49 countries of the region in a paper of this size. We did not abandon the route of journal articles but sought to add other platforms. We re-entered Google Scholar and discovered a wealth of very relevant literature in UNESCO and UNICEF reports and policy documents such as Education for All Global Education Monitoring (EFA GEM) Reports and statistics from the UNESCO UIS. In our view, these are internationally recognised sources of information on whose bases the entire world makes decisions in their individual countries, just as the world currently relies on information from the World Health Organisation for guidance regarding tackling the COVID-19 pandemic. We, therefore, settled for a combination of journal articles and such reports.
Regarding inclusion, we adopted Cronin, Ryan and Coughlan’s (2008) criteria of current literature and hence settled for literature published in the last 10 years (2009–2019). We are of the view that countries take quite some time to make policy decisions such as those to do with education financing. Equally, they tend to take time to change policy decisions. We, therefore, felt that a 10-year period was suitable for such dynamics.

Data Extraction
Keywords for our Google Scholar searches included the following: education; education financing; financing primary and secondary education; sub-Saharan Africa; resource allocation; funding, and fund allocation. Firstly, we required every publication to have been published within the stipulated period. In very few cases we found it necessary to track an issue beyond the stipulated publication timeframe. Secondly, the publications needed to fall within the scope of financing of primary and secondary education in sub-Saharan Africa. Thirdly, for each publication, we examined the title, the abstract, and in some cases, the executive summary and the content pages for relevance. In the fourth instance, we read every relevant publication detail, focusing on the nature of education financing contained therein.

Data Analysis
We analysed data using the conceptual framework, searching for evidence of public education financing, external education financing and private education financing. We then adopted a thematic approach: familiarising self with data; generating initial themes; reviewing themes; defining and naming themes; and producing the report (Braun & Clarke, 2006; Miles & Huberman, 1994).

Literature Review
We present the results through five themes: Organisation of Funding; Scale of Financial Spending; Targeted Education Funding; Sources of Funding and Education Inequality.

Organisation of funding
In a literature review on school funding, Prew, Msimango and Chaka (2011) report on five countries of SSA: Ethiopia, Lesotho, Malawi, South Africa and Uganda. They found some commonalities in the way funding was organised. All the countries had, to some degree, devolved the responsibility for education provision and financing to school and local community levels. The devolution came with growth in systems meant to enforce financial accountability at school level. However, there was tardiness on the part of governments to devolve real financial decision-making power. This decentralisation came with attempts at making primary education fee-free. However, fees constituted only a portion of the education costs parents and communities had to bear. In four of the countries other than South Africa, attempts to provide full access to free primary education resulted in massive increases in enrolments, leading to over-crowded classrooms, heightened teacher stress levels, high teacher-pupil ratios, falling learner retention and reduced rates of literacy. In some of the countries such as Malawi, there seemed to be over-dependence on donor funding. In all countries, in the majority of cases, there was limited financial management capacity (planning, organising, controlling and coordinating) and, lack of training thereof, at the grassroots level. Overall, the devolution largely benefitted schools serving middle-class communities as they had far greater financial management capacities. There was a need for robust management information systems.

Zubairi and Rose (2019) write about equitable financing of secondary education. They argue that for countries to achieve SDG 4 targets by 2030, the way governments and donors disburse their resources will have a huge bearing on that. In their view, there is a need to invest resources to mitigate those factors that cause children from disadvantaged backgrounds to drop out before completing primary school, such as out-of-pocket expenses borne by poor households. Resource allocation needs to follow the principle of progressive universalism. Due to increasing demand for secondary education, abolishing fees is likely to be retrogressive, so the way forward must be to target the most disadvantaged and fund such costs as uniforms, boarding and transport. This emphasises the need for greater use of formula funding, which we address later in the paper. Governments should consider allocating greater proportions of funding to capital expenditure (Zubairi & Rose, 2019).

Writing in the context of Southern Africa, Branson and Lam (2017) examine the impact of the no-fee policy on enrolment and school performance. They argue that it remains unresolved whether school fees are beneficial in a basic education system. Proponents of fee charging say the practice improves parental ownership and involvement in education and that it provides an important income stream. Those against argue that fees are prohibitive for the disadvantaged and perpetuate inequality. According to the World Bank and UNICEF (2009), fee elimination without the reduction of other education-related expenses has little impact on the enrolment of the poorest learners. In South Africa, one such cost is uniform expenses (Branson & Lam, 2017). The latter authors found that the no-fee policy had no statistically significant impact on enrolment in post-compulsory education, educational attainment or secondary school completion by age 20. They report that one possible reason was that budgets
were line-itemised, making school-specific improvement difficult.

Baghdady and Zaki (2019) studied secondary education governance in SSA and identified accountability as very important in handling education finances. They cite two examples of achieving high-level accountability in that regard. Uganda established an Education Funding Agency Group (EFAG). This agency brings together all donors who provide financial and technical support to education. The aim is to improve coordination. Senegal developed a National Education Account (NEA) with UNESCO support. NEA is a comprehensive information system that helps to generate reliable and transparent data on education spending from all sources of funding such as government, households and external agencies. In 2016, the NEA showed that education spending in the country was steadily rising and that public resources and households shared the expenditure almost equally (48% each), with donors funding the remainder. The authors conclude that NEAs are important as they help countries to better monitor their financial flows, thereby enabling them to make informed decisions.

Scale of financial spending

Tilak (2009) compared expenditure figures in SSA with spending elsewhere in the world. The author reports that in 2005, SSA spent 4.4% of GDP on education while the developed world allocated 5.3%. In that year, the world average was 4.9%. In 2006, the world’s average expenditure on primary education per pupil was 14% of GDP while in the developed countries it was 17%. In SSA, it was 13%. In 2005, SSA spent an average of US$167 per primary school pupil while the average for the rest of the world was six times higher and that of the developed world was 30 times higher (Tilak, 2009). Key factors contributing to comparatively low expenditure in education in SSA included misplaced priorities, heavy military expenses and fiscal constraints (Tilak, 2009). As we observe in this paper, these averages do not present a complete picture of what happens in individual countries; however, they provide valuable insights regarding the goings-on in the region.

In low-income countries including most of SSA, 46% of public education resources are allocated to educating the most privileged 10% of students because the majority of the poorest children do not start school, and even when they do, they drop out of school after few years (Imchen & Ndem, 2020). According to UNESCO (2011), SSA countries invest a relatively large proportion of government budgets in the education sector despite their relatively low GDPs per capita. The range for countries in the SSA region is 11% to 28%, with an average of 18.3%. While this is the case, most of the budget goes to teacher salaries.

The data show that in general, teacher salaries in secondary education (including lower and upper levels) comprised an average of 60% of all education spending. Furthermore, overall growth in GDP outperformed increases in education expenditure (UNESCO, 2014).

While fiscal constraints seem to bedevil SSA, multilateral donors are reportedly reducing their share of aid to primary towards secondary education (UNESCO, 2015; Zubairi & Rose, 2019). For example, the World Bank, the largest multilateral donor in the world, reduced its share from 65% between 2002 and 2004 to 47% between 2011 and 2013 (UNESCO, 2015).

The EFA GEM Report Policy Paper 18 (July 2015), on the costs of reaching new education targets by 2030, inclusive of but not exclusively about SSA, reveals pertinent education financing realities (UNESCO, 2015). It states that, on average, the annual total cost of achieving universal pre-primary, primary and secondary education in low and lower middle income countries was projected to increase from US$149 billion in 2012 to US$340 billion between 2015 and 2030. In low-income countries, the total cost will triple in the latter period because of greater student numbers and higher per-student expenditure to improve quality and address marginalisation. Government spending on education in low-income countries will need to increase by 50% as a share of GDP between 2012 and 2030. The report categorically declares that domestic resources in those countries will be insufficient to achieve the key education targets by 2030. It further states that if the world is to meet targets, aid will need to remain a crucial source of funding in the period for those countries. Across low- and middle-income countries, donor aid for pre-primary, primary and secondary education needs to increase at least six times (UNESCO, 2015).

Targeted education financing

UNESCO’s GEM Report Policy Paper 23 (January 2016) argues that every child should have a textbook. The amount a country invests on learning materials is a good indicator of the level of its commitment to quality education for all. The report indicates that textbooks are particularly relevant in improving learning outcomes in low-income countries with large classes. In SSA, access to textbooks is limited. In many countries therein, students at all levels either share or do not have textbooks. For example, in Cameroon in 2012, there was only one reading textbook for 12 students and one mathematics textbook for 14 students in Grade 2 (UNESCO UIS & UNICEF, 2015). The GEM argues that the provision of textbooks in early grades should be the highest priority. It refers to the World Bank’s 2008 analysis of 19 SSA countries. Of those countries, only Botswana had
of increasing public funding, namely increasing the share of public budgets and ensuring economic growth. However, due to narrow tax bases and many other competing demands, most SSA countries will find it difficult to increase the share of public budgets.

Fredriksen and Fossberg (2014) report that, in 2011, external aid contributed a moderate amount of 12% as a proportion of the total education aid in SSA. They see external aid playing a diminishing role (while it is still important) compared to domestic spending. However, as stated above, in fragile states of the region, aid is likely to remain crucial. Regarding private education financing, they report that households contribute immensely on textbooks, uniforms, classrooms, salaries, and so on.

Mingat, Ledoux and Rakotomalala (2010) report that the average unit cost for secondary education was 12% of GDP per capita in low-income countries outside SSA, but in the latter, it was a massive 40%. This needs to decrease. Fredriksen and Fossberg (2014) recommend more efficient and evidence-based approaches to using public resources and aid. They conclude that both external aid and the share provided by governments have to increase, especially in fragile economies. However, they are quick to point out that, due to the changing aid environment and competing national demands, it is unrealistic to expect large influxes of new funds from either of the two. Therefore, the most viable but difficult option is rapid economic growth.

Senadza and Hodey (2015) studied the effects of public expenditure on two primary education outcomes in SSA, namely, net enrolment rate (NER) and persistence to the last grade. They conducted the study during the period 2000–2012. They found that public expenditure exerts significant positive effects on both outcomes. They argue that sufficient and efficient resource allocation to education facilitates human development and economic growth and, over time, reduces the burden of poverty. They report that SSA is home to more than half of the world’s out-of-school primary school age children and that SSA lags behind other developing regions in that regard. They also found huge disparities between SSA countries regarding teacher-pupil ratios, ranging from 1:21 to 1:100. They conclude that schooling for all is attainable if governments are willing to prioritise primary education. SSA countries must critically consider increasing public spending on education. Donor agencies and development partners must also increase aid.

Mestry, Du Plessis and Shonubi (2017) studied state funding in selected SSA countries, namely South Africa, Zimbabwe and Nigeria. They report that South Africa introduced no-fee schools in 2007; by 2016, 60% of public schools were

close to a 1:1 student-textbook ratio for all subjects in all secondary school grades. In 2014, Rwanda was close to reaching a 1:1 ratio for primary schools, but much was required at the secondary level, where three students shared a history textbook and five a literature textbook. In Malawi, between 2000 and 2007, the percentage of students sharing a textbook, with at least two per book, or not having any, increased from 28% to 63%.

In South Africa, students, especially girls, reportedly did better in reading tests when they had their own copies (Zuze & Reddy, 2014). A cross-country analysis of data in 22 SSA countries revealed that a student-textbook ratio of 1:1 for core subjects of reading and mathematics increased literacy scores by 5%–20% (UNESCO, 2016). This report argues that the cost of producing textbooks needs reducing. Possibilities include domestic publishing and binding, and use of higher quality paper for durability. However, in most countries in question, the current financing situation was unpredictable and unsustainable, thus exacerbating learning inequalities.

A study of 12 African countries (UNESCO, 2011) revealed that school supplies and learning materials made up 34% of total household spending on education. The study suggests a re-look at expenditure on textbooks. There was also a need to carry out effective demand forecasting. Textbook funding needed to increase. In this regard, the World Bank recommended a minimum increase of 3–5% and 4–6% for primary and secondary education respectively. Donors needed to double their current 6% funding for textbooks. There was a need to incentivise domestic funding that was also guided by better information.

Sources of funding

Presenting a case for investing in secondary education in SSA, Fredriksen and Fossberg (2014) argue that, while aid will continue to play a role, particularly in fragile states, in the long run, it is countries’ capacities to achieve sustained economic growth that will constitute the single most important factor determining their ability to meet the financing of education therein. These authors say that the link between education and the economy is growing, including the development of skills and technology. Education, in combination with other factors, plays a big role in equalising life chances for children from different family and socio-economic backgrounds.

While there are vast differences between SSA countries in terms of investing in secondary education, on average, the funding needed to expand secondary education in the region is quite huge, for both investment and recurrent costs. Public education financing will remain by far the most important and sustainable (Fredriksen & Fossberg, 2014). These authors identify two ways
no-fee paying. A national school nutrition programme feeds 8.7 million children every school day. As much as 90% of provincial education departments’ budgets go to salaries. School governing bodies pay extra staff. Regarding capital investment, the state builds and undertakes to maintain buildings and to provide water, electricity, sewerage and telephone facilities. Furthermore, the South African National Norms and Standards for School Funding policy requires equitable school funding. The funding model is pro-poor and schools in quintiles 1 to 3 (the poorest) receive seven times the amounts of funding quintiles 4 to 5 (the wealthiest) receive. All schools in quintiles 1 to 3 are no-fee paying. While the pro-poor model has provided a huge relief to poor parents, the indirect costs of education such as school uniforms are still a severe burden to them. The authors conclude that the country needs serious interventions to improve the quality of education.

Regarding Zimbabwe, Mestry et al. (2017) report that in the first decade of its independence (1980–1990) the country implemented the Education for All policy. It built schools in previously marginalised areas. As from 1991, the country reverted to charging fees and levies, though primary education remains compulsory. Parents are involved through School Development Committees. Government funds the Basic Education Assistance Module, a fund intended to pay fees for orphans and other vulnerable children. Through the Education Transition Fund (ETF), the government forged partnership with UNICEF to improve the quality of education by distributing learning materials. The Public Sector Investment Programme serves to build infrastructure in aid of non-government schools. Overall, despite the noble initiatives, government funding has significantly dwindled. There is now over-dependence on donor funding.

In Nigeria, the constitution stipulates that education is the responsibility of the federal, state and local government levels of administration, with each contributing 56%, 24% and 20% funding respectively. Public primary education is free, funded through the Universal Basic Education plan from the federal government. State governments tend to spend more on tertiary than secondary education. Households pay fees, textbooks, private lessons and levies. Philanthropists such as foundations also contribute funding. The authors report that the Nigerian system is, overall, unprepared for the 21st-century’s high primary education completion needs. Government is failing to provide adequate infrastructure and salaries. Summarising their findings regarding the three countries, Mestry et al. (2017) argue that free primary education is currently unattainable in the three countries.

**Education inequality**

Temitope Obasuyi and Rasiah (2019) studied educational inequality in 25 of the 49 SSA countries. They argue that educational inequality has become entrenched in many developing countries, but it is particularly severe in SSA countries. Education inequality is a major obstacle for development plans. It keeps large sections of populations in abject poverty. Temitope Obasuyi and Rasiah (2019) report that, among the countries they studied, all except Zimbabwe have not been able to reduce education inequality. They report that the Education Inequality Gini coefficient (EIG) results reveal that education inequality is severe across SSA. A coefficient of zero (0) denotes perfect equality while a coefficient of one (1) denotes perfect inequality. Zimbabwe’s EIG is below 0.3. Burkina Faso, Cote d’Ivoire, Ethiopia, Gambia, Guinea, Niger, Senegal, Mali and Sierra Leone recorded a very high EIG of = or > 0.7. Angola, Comoros, Gabon, Ghana, Mozambique, Nigeria and Togo recorded a high EIG of between = or > 0.5 and = or < 0.7. The remaining countries: Namibia, Kenya, Uganda, Zambia, Congo, Democratic Republic (DR) Congo, Rwanda and Cameroon recorded a moderate EIG of between > or = 0.2 and < 0.5.

Further, despite endowments such as oil and gas in some of the countries, there has been low investment in education. Temitope Obasuyi and Rasiah (2019) argue that the concentration of wealth within a small elite is the prime cause of education inequality. Therefore, there is a need for pro-poor policies in order to raise their education levels. They conclude that SSA countries remain entrenched in poverty because of a vicious cycle of wealth inequality. Unless this is resolved, it will be difficult, if not impossible, to attain appreciable levels of economic development.

Disparities in wealth are the prime driver of learning inequalities. Data from East Africa show that the learning of children from less advantaged households is at least one year behind that of children of the same age from wealthier backgrounds (Rose & Alcott, 2015). In South Africa, by Grade 3, the poorest 60% of children are three grade levels behind the wealthiest. The gap increases to four grade levels by Grade 9. A massive 84% of the poorest quintile are not able to divide 24 by 3 in Grade 3 and 59% of this same group are still unable to do so by Grade 9 (Spaull & Kotze, 2015).

**Discussion**

The evidence from the literature is clear; education has a positive impact on improving lives, reducing inequality and contributing to a country’s economic growth. Therefore, we cannot over-emphasise the
importance of investing in education. While there are vast differences between SSA countries regarding the extent of coping with education financing demands, overall, SSA lags behind other developing regions in terms of the public financing of primary and secondary education. This is the case despite some decent levels of economic growth on the part of some countries therein (Husson, Reugue, Steer & Sherif, 2018).

Governments will remain the major source of education funding in the region. Currently, the bulk of such financing goes to recurrent expenditure. Without greater investment in capital expenditure, SSA is not likely to achieve sustainable development in their education systems. While external aid will remain an important source of education funding in SSA, the trend in some countries to rely heavily on such funding is unsustainable. The situation is not simply a shortage of government funds; it also has to do with levels of accountability (Baghdady & Zaki, 2019) regarding education expenditure. In this connection, establishing agencies such as the EFAG in Uganda and NEA in Senegal is useful. However, such bodies must do the work for which they are created.

The no-fee policy has gone a long way in addressing the plight of the poor (Branson & Lam, 2017). However, the model must be applied carefully, as it is not without its own side effects. The effects on education attainment and completion are not abundantly clear. The threat of creating continued dependence among the beneficiaries may be as strong and unsustainable as over-reliance on external funding.

Households continue to contribute significantly to education financing in the region. However, due to huge wealth inequalities within countries, many households find it increasingly difficult to cope with the costs of educating their children. This has led to massive education inequalities; the current figures thereof are quite depressing (Temitope Obasuyi & Rasiah, 2019). Where there is no or little economic growth and a subsequent widened disparity in the spread of wealth in a country, the negative impact on households in this regard is likely to stay. Therefore, SSA economies must necessarily grow significantly. Economic growth and more equitable distribution of wealth in a country, are the foundations for improved and sustainable financing of education. Targeted education financing, where governments ring-fence certain funds to finance specific items such as textbooks (UNESCO, 2016), seems to be another useful strategy.

Conclusion
Achieving equity is at the heart of SDG 4. As things stand, the SSA region will not have sufficient financial resources to meet SDG 4 targets by 2030. Therefore, the noble but ambitious promise of the UN 2030 Agenda for Sustainable Development is under threat. International aid is too short-term and unpredictable to address the costs required for SDG 4 adequately. Thus, the capacity of countries to achieve sustained economic growth is the most important dynamic that will determine the future of education financing. Such economic growth must come with deliberate and sustained strategies to distribute equitably the wealth therefrom, in order to address inequality. There is also a need for stronger public-private partnership towards education financing, for example, at the various tiers of government: district, provincial, and national. For all this, SSA requires and deserves more capable, accountable, shrewd and well-functional governments.

Authors’ Contribution
The authors worked together throughout the process of producing this work including: data search, data sifting, draft writing and article fine-tuning. Both authors read the final manuscript.

Note
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References
Baghdady A & Zaki O 2019. Secondary education governance in sub-Saharan Africa. Doha, Qatar: World Innovation Summit for Education. Available at https://www.wise-qatar.org/app/uploads/2020/04/wise-9-report-web.pdf. Accessed 9 November 2020.
Branson N & Lam D 2017. The impact of the no-fee school policy on enrolment and school performance: Evidence from NIDS Waves 1-3 (A Southern Africa Labour and Development Research Unit Working Paper Number 197). Cape Town, South Africa: SALDRU, University of Cape Town. Available at http://www.opensaldru.uct.ac.za/bitstream/handle/10900/856/2017_197_Saldrupw.pdf?sequence=1. Accessed 10 November 2020.
Braun V & Clarke V 2006. Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2):77–101.
Cronin P, Ryan F & Coughlan M 2008. Undertaking a literature review: A step-by-step approach. British Journal of Nursing, 17(1):38–43. https://doi.org/10.12968/hjon.2008.17.1.28059
Dalrymple K 2016. Fair financing: Education finance policy for equity. A literature review. Washington, DC: Save the Children. Available at https://www.savethechildren.org/content/dam/usas/reports/advocacy/fair-financing-education-finance-policy-for-equity.pdf. Accessed 18 May 2020.
Fredriksen B & Fossberg CH 2014. The case for investing in secondary education in sub-Saharan Africa (SSA): Challenges and opportunities. International Review of Education, 60:235–259. https://doi.org/10.1007/s11159-014-9407-3
Gough D 2007. Weight of evidence: A framework for the
appraisal of the quality and relevance of evidence. Research Papers in Education, 22(2):213–228. https://doi.org/10.1080/02671520701296189

Hallinger P 2013. A conceptual framework for systematic reviews of research in educational leadership and management. Journal of Educational Administration, 51(2):126–149. https://doi.org/10.1108/09578231311304670

Hallinger P & Bryant DA 2015. Accelerating knowledge production on educational leadership and management in East Asia: A strategic analysis. School Leadership & Management, 33(3):202–223. https://doi.org/10.1080/13632434.2013.773884

Husson G, Reugue N, Steer L & Sherif Y 2018. Analysis of education financing in West and Central Africa within development and humanitarian contexts and dialogue on future prospects in light of SDG4. Paper presented at the Global Partnership Education (GPE) Conference, Dakar, Senegal, 1–2 February.

Imchen A & Ndem F 2015. Taking education for all goals in sub-Saharan Africa: Patterns, problems and possibilities. Comparative Education, 45(2):151–174. https://doi.org/10.1080/03050060902920518

Lewin KM 2009. Access to education in sub-Saharan Africa: Problems, patterns and possibilities. Comparative Education, 45(2):143–150. https://doi.org/10.1080/03050060902920492

Mestry R, Du Plessis P & Shonubi OK 2017. State funding in selected African countries: Implications for access to public education. In E Shizha & N Makuvaza (eds). Re-thinking postcolonial education in sub-Saharan Africa in the 21st century: Post-millennium development goals. Rotterdam, The Netherlands: Sense.

Miles MB & Huberman AM 1994. Qualitative data analysis: An expanded sourcebook (2nd ed). London, England: Sage.

Mingat A, Ledoux B & Rakotomalala R 2010. Developing post-primary education in sub-Saharan Africa: Assessing the financial sustainability of alternative pathways. Washington, DC: The World Bank.

Montoya S & Benavot A 2016. Missing from school: The education challenge in sub-Saharan Africa, UNESCO Institute of Statistics, 20 July. Available at http://uis.unesco.org/en/blog/missing-school-education-challenge-sub-saharan-africa. Accessed 10 November 2020.

Nudzor HP 2015. Taking education for all goals in sub-Saharan Africa to task: What’s the story so far and what is needed now? Management in Education, 29(3):105–111. https://doi.org/10.1177%2F089202615584105

Prew M, Msimango S & Chaka M 2011. Literature review on school funding in sub-Saharan Africa. Johannesburg, South Africa: Centre for Education Policy Development (CEPD). Available at http://www.iep.unesco.org/sites/default/files/literat ure_review_on_school_funding_in_sub-saharan_africa_0.pdf. Accessed 5 April 2020.

Rose P & Alcott B 2015. How can education systems become equitable by 2030?: DIDF think pieces – Learning and equity. Brighton, England: Health & Education Advice & Resource Team (HEART). Available at https://doi.org/10.1080/20421338.2019.1567655

Senadza B & Holey LS 2015. An assessment of the role of public education expenditure in achieving the MDG on education in sub-Saharan Africa. Paper presented at the international research conference on Multidisciplinary Research and Transformation in Africa, Legon, Ghana, 18–20 June. Available at https://doi.org/10.1080/03050060902920807

Spaull N & Kotze J 2015. Starting behind and staying behind in South Africa: The case of insurmountable learning deficits in mathematics. International Journal of Educational Development, 41:13–24. https://doi.org/10.1016/j.ijedudev.2015.01.002

Stewart R 2014. Changing the world one systematic review at a time: A new development methodology for making a difference. Development Southern Africa, 31(4):581–590. https://doi.org/10.1080/03766835.2014.907537

Temitope Obasuyi FO & Rasiah R 2019. Addressing education inequality in sub-Saharan Africa. African Journal of Science, Technology, Innovation and Development, 11(5):629–641. https://doi.org/10.1080/20421338.2019.1567655

Tilak IBG 2009. Editorial: Basic education and development in sub-Saharan Africa. Journal of Education in Cooperation: Education and Development, 1(1):5–17. https://doi.org/10.15027/34315

United Nations 2015. Transforming our world: The 2030 Agenda for Sustainable Development. United Nations Resolution A/RES/70/1. Available at https://www.un.org/ga/search/view_doc.asp?symbol=a%2FRES%2F70%2F1&Lang=E. Accessed 15 April 2020.

United Nations Children’s Fund 2015. The investment case for education and equity. New York, NY:
Author. Available at https://www.unicef.org/media/50936/file/Innovative_Solutions_to_Educational_Indicators.pdf. Accessed 21 April 2020.

United Nations Educational, Scientific and Cultural Organization 2011. Tanzanian education sector analysis: Beyond primary education, the quest for balanced and efficient policy choices for human development and economic growth. Paris, France: Author. Available at https://dakar.iiep.unesco.org/sites/default/files/field_publication_files/tese0014.pdf. Accessed 13 April 2020.

United Nations Educational, Scientific and Cultural Organization 2014. Education for All Global Monitoring Report 2013/4. Paris, France: Author. Available at https://unesdoc.unesco.org/ark:/48223/pf0000225654. Accessed 14 November 2020.

United Nations Educational, Scientific and Cultural Organization 2015. Pricing the right to education: The cost of reaching new targets by 2030. Paris, France: Author. Available at https://resourcecentre.savethechildren.net/node/8946/pdf/232197e.pdf. Accessed 5 April 2020.

United Nations Educational, Scientific and Cultural Organization 2016. Education for people and planet: Creating sustainable futures for all. Paris, France: Author. Available at https://unesdoc.unesco.org/ark:/48223/pf0000245745. Accessed 13 April 2020.

UNESCO Institute for Statistics 2015. A growing number of children and adolescents are out of school as aid fails to meet the mark (Policy Paper 22/Fact Sheet 31). Montreal, Canada: Author. Available at http://uis.unesco.org/sites/default/files/documents/f s31-a-growing-number-of-children-and-adolescents-are-out-of-school-as-aid-fails-to-meet-the-mark-2015-en.pdf. Accessed 14 November 2020.

UNESCO Institute for Statistics 2016. Leaving no one behind: How far on the way to universal primary and secondary education? (Policy Paper 27/Fact Sheet 37). Available at http://uis.unesco.org/sites/default/files/documents/f s37-leaving-no-one-behind-how-far-on-the-way-to-universal-primary-and-secondary-education-2016-en.pdf. Accessed 6 November 2020.

UNESCO Institute for Statistics & UNICEF 2015. Fixing the broken promise of education for all: Findings from the global initiative on out-of-school children. Montreal, Canada: UNESCO Institute for Statistics. https://doi.org/10.15220/978-92-9189-161-0-en

Walker J, Pearce C, Boe K & Lawson M 2019. The power of education to fight inequality: How increasing educational equality and quality is crucial to fighting economic and gender inequality (Oxfam Briefing Paper). Oxford, England: Oxfam GB. https://doi.org/10.21201/2019.4931

World Bank & UNICEF 2009. Abolishing school fees in Africa: Lessons from Ethiopia, Ghana, Kenya, Malawi and Mozambique. Washington, DC: World Bank. Available at https://www.unicef.org/publications/files/Abolishing_School_Fees_in_Africa.pdf. Accessed 29 November 2020.

Xiao Y & Watson M 2019. Guidance on conducting a systematic literature review. Journal of Planning Education and Research, 39(1):93–112. https://doi.org/10.1177%2F0739456X17723971

Zubairi A & Rose P 2019. Equitable financing of secondary education in sub-Saharan Africa (Mastercard Foundation background paper). Cambridge, England: Research for Equitable Access and Learning (REAL) Centre, University of Cambridge. Available at https://mastercardfdn.org/wp-content/uploads/2019/03/SEA-Finance-Equity_REAL_Final-Version_Feb-2019.pdf. Accessed 21 April 2020.

Zuze TL & Reddy V 2014. School resources and the gender reading literacy gap in South African schools. International Journal of Educational Development, 36:100–107. https://doi.org/10.1016/j.ijedudev.2013.10.002