

WHAT IS THE APPROPRIATE HIGHER EDUCATION FINANCE MODEL FOR AFRICA? SOME REFLECTIONS

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ABSTRACT¹

The evolution of tertiary education financing models in Sub-Saharan Africa reflects a complex interplay between cultural, political, and economic forces. The transition, especially of universities, from vibrant centres of debate to subdued institutions under authoritarian regimes, coupled with the advent of market-driven economic reforms, has redefined universities' role in Africa's society. This article while not seeking to explore how these historical shifts have shaped the current landscape of tertiary education financing and its implications for the region, it does not forget them in considering the recent frameworks for higher education finance, especially in Kenya. It concludes that in Kenya's case the evidence seems to support the argument that "free" provision alone might not inherently lead to expanded access and equitable outcomes. However, implementing a functional income-contingent contribution or "graduate tax" system is complex and relies heavily on a well-organised formalised market. In the case of Kenya, the presence of a large informal employment sector and growing graduate unemployment poses challenges in accurately capturing income and enforcing such a tax system as a mechanism for financing expanded tertiary education system.

Keywords: higher education finance, Africa's higher education, Kenya's higher education finance, income-contingent loans, graduate tax, human capital

INTRODUCTION

The widely accepted consensus is that tertiary education holds considerable significance, contributing to economic growth, cultural transmission, and individual freedom (Barr and Crawford 1998). Consequently, the funding of tertiary education is a critical decision for governments and society. In general, there are three primary approaches to financing tertiary education: publicly funded "free" education, cost-sharing arrangements, and upfront direct payments (Oketch 2016). According to Barr and Crawford (1998), while relying solely on public funding can work for access by a small portion of the population (approximately 5%) to maintain a high-quality tertiary education system, it becomes unfeasible for a mass higher education system. The authors further note that expanding higher education to include a larger portion of the population requires substantial input from private funding. Private funding can

originate from four sources: students' families, students' earnings during their studies, employers, and students' future earnings. However, the first three sources are seen as partial solutions and are considered insufficient. Relying solely on parental contributions is problematic because it is not a substantial source of funding (Barr and Crawford 1998, 46). In many African contexts, students often cannot find paid work opportunities while studying, and Barr and Crawford (1998) while writing in the context of England also note that even if such opportunities were available, they would compete with academic commitments and leisure activities.

Furthermore, although employer contributions are worth considering, they have limitations and could essentially become a tax on graduates' employment if pushed too far. Consequently, in a mass higher education system, the most practical and substantial funding source, which is not severely inadequate, is a loan system that allows students to borrow against their future earnings (Barr and Crawford 1998, 46). This approach has been adopted by several African countries in recent years to finance their higher education systems. This article examines this strategy, focusing on the case of Kenya. The following section briefly considers the higher education context in Africa, connecting it to the human capital theory life-cycle conceptual framework. This is followed by an exploration of demographic trends and their relation to demand for higher education. Subsequently, the article examines the link between economic performance and higher education. A discussion of cost-sharing follows. The case of Kenya is used to contemplate equity and to introduce the progression of Kenya's financing model from a somewhat "free" university education system to the more recently introduced flexible scholarship and loan funding framework. The conclusion of the article follows this examination.

BACKGROUND AND CONTEXT

In the early 1960s and 1970s, when most sub-Saharan African nations established universities, the decision-making process could be argued to mirror what Gary Becker referred to as the cultural and economic dimensions of human capital (Becker 1993) which were at the time seen as pivotal drivers for advocating "free" university education. These newly independent African states regarded universities as symbols of sovereignty, akin to national flags or airlines (Ajayi, Goma, and Johnson 1996), underlining their significance during the formative stages of nationhood. Notably, universities served as vibrant hubs for intellectual debates, as seen in the case of Makerere University in Uganda, where rigorous discussions unfolded between political leaders and academics concerning the identity and ideals of independent African nations.

As time progressed, the political establishment increasingly sought to control university

discourse, leading to a shift from open debates to government-directed narratives. This shift was often enforced through co-optation of compliant academics and suppression of those perceived as radical or critical of the government. Instances of imprisonment, torture, and even fatalities marred this period, marking a tumultuous era for some of these nations' universities. Simultaneously, African governments recognised universities' role in training a competent indigenous workforce capable of replacing departed colonial personnel, thus aligning with the broader goal of "Africanising" management of domestic affairs (Ajayi et al. 1996). This dual perspective highlighted the multifaceted role of universities, encompassing cultural significance and economic value, specifically in terms of lucrative graduate earnings and premium opportunities within the public sector at the time.

Although it could be argued that universities somewhat and relatively functioned reasonably well under varying degrees of political interference during the initial years, with politicians enjoying the support of many African academics in their struggle to control and direct the universities (Ajayi et al. 1996, 95), a pivotal turning point emerged more strongly in the 1980s. The wave of military coups and autocratic regimes undermined universities' autonomy and vibrancy, rendering them more subdued despite continued reliance on dwindling state funding. This marked a challenging period for many universities (outside South Africa), where institutional confidence and influence waned as authoritarian regimes took control, occasionally resorting to violence against academics.

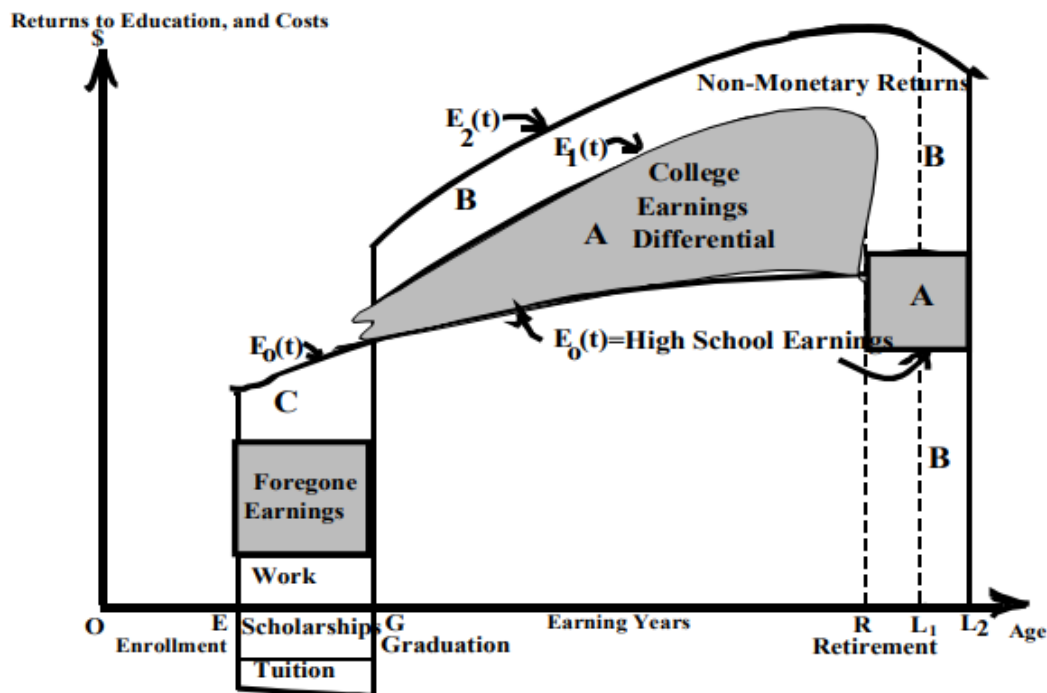


Figure 1: HCT life-cycle conceptual framework (Source McMahon and Oketch, 2010; 2013).

Coinciding with this shift was the advent of Structural Adjustment Programs (SAPs) in the 1980s, a series of economic reforms that propagated market-oriented principles and aimed to diminish the government's role in providing public goods, including higher education. Consequently, the human capital life-cycle conceptual framework which I would argue to have somewhat underpinned universities' role in African society at independence was dismantled. Figure 1 illustrates this life-cycle human capital conceptual framework.

The human capital theory life-cycle conceptual framework (Figure 1) includes market earnings, private non-market benefits and social benefits to others, including future generations. The process occurs with each family over their life cycle and over several generations in ways that as McMahon and Oketch (2010; 2013) noted, lead to different life chances among families.

Considering non-market outcomes has implications for financing modalities (Oketch 2021). Non-market benefits arise because the same human capital acquired through, HE is used on the job, then it is carried home and used to increase productivity of time in household which generates satisfactions and, in many instances, this same human capital is used in community in public service and other community wide activities that benefit others (McMahon and Oketch 2013). The challenge in Africa is that while it can be argued that this human capital life-cycle was present immediately following independence, it did not survive beyond the first generation of Africans who entered university education in the 1960s. Ajayi, Goma, and Johnson (1996, 95) have put it aptly, "The 1960s, the decade of independence, made significant impact on the development of higher education in Africa To some extent, the politicians regarded the universities, dominated as they were by expatriate staff, as part of the apparatus of imperialism, ... which had to be decolonized." The government, had the support of African academics, and this relationship has been described by Mamdani (1993) as a destructive conflict whereby "it was the expatriate staff defending their privileges who called for the defence of university autonomy and maintenance of universal standards while the African staff, many of whom felt alienated and discriminated against, tended to seek the intervention of the politicians to give the universities a national character and ensure rapid Africanisation" (Mamdani 1993, cited in Ajayi et al. 1996, 95).

The evolution of tertiary education financing models in Sub-Saharan Africa reflects this historically complex interplay between cultural, political, and economic forces. The transition from vibrant centres of debate to subdued institutions under authoritarian government regimes, coupled with the advent of market-driven economic reforms, has redefined universities' role in Africa's society. This article while not seeking to explore how these historical shifts have shaped the current landscape of tertiary education financing and its implications for the region, it does

not forget them in considering the recent frameworks for higher education finance, especially in Kenya.

DEMOGRAPHY AND DEMAND

During the 1990s, the prevailing force of neoliberal economic ideology fully dismantled arguably the once-valued human capital life-cycle conceptual framework in Africa. This shift was further exacerbated by the weakened state of universities due to the political climate. Unlike the arguably somewhat prominent role universities held in shaping African society during the 1960s and early 1970s, they were no longer prominently at the forefront of societal development.

Ironically, within this context of neoliberal economic management driven by structural adjustment programmes (SAPs), the demand for higher education gained remarkable momentum. The period, marked by the looming influence of Millennium Development Goals (MDGs) that primarily emphasised basic education, saw a significant exodus of university academics from Africa. Many sought refuge, especially in United States of America, and even those who had pursued overseas scholarships often opted not to return after completing their studies due to a lack of prospects back home.

Yet, the 1990s also witnessed transformative shifts in several African countries. The demographic landscape, coupled with political changes following the fall of the Berlin Wall, began to reshape the demand and expansion of tertiary education. The rise of democracy, particularly notable in Anglophone African nations where the call for multiparty politics gained momentum, introduced a competitive political environment with a pronounced social agenda (Stasavage 2005). This dynamic era held promise not only for political evolution but also for universities and tertiary education.

However, as the political landscape evolved, demographic realities play a pivotal role in shaping the analysis of university education financing (Oketch 2003). By 2020, Sub-Saharan Africa boasted a staggering population of 1.136 billion, primarily driven by a youthful demographic. Despite this, the higher education enrolment participation rate remained below 10 per cent of the cohort, standing at approximately 9.45 per cent in 2019. Comparatively, the United States, with a population of about 328 million, enjoyed a cohort participation rate of 88 per cent, showcasing a significant disparity.

Even on a global scale, where the average participation rate stood at 40.4 per cent, Sub-Saharan Africa's population size – nearly 1.14 billion – underscored a mere 10 per cent access rate to higher education. This glaring *demand-supply gap* is projected to intensify in the coming years, making the quest for an effective financing mechanism a pressing concern for

governments. Figure 2 visually encapsulates this intricate challenge of demand and the pursuit of viable financing strategies.

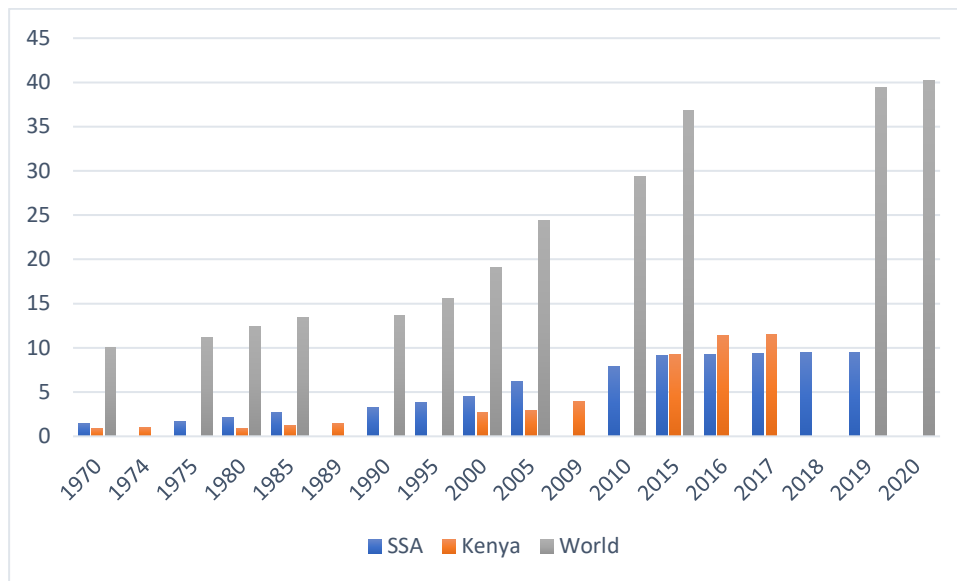


Figure 2: Tertiary Education Enrolment Gross (%) 1970–2020 (Source: Constructed by author using World Bank open data)

In essence, the 1990s saw the erosion of established immediate post-independence frameworks, both economic and educational, in Sub-Saharan Africa. The confluence of neoliberal economic shifts, demographic realities, and changing political dynamics reshaped the landscape of tertiary education financing, necessitating what the World Bank often described as “innovative” approaches to meet the surging demand for higher education.

The included graph (Figure 2), with a specific focus on Kenya, illustrates the trajectory of higher education participation rates since the 1970s. Notably, both Kenya and the broader Sub-Saharan Africa (SSA) region experienced a period of relatively slow expansion for about two decades. This slow growth was consistent across the globe until approximately 1995 when a more significant upswing in tertiary education participation became evident, especially within SSA.

For instance, examining Kenya reveals that by 2015, its participation rate had equalled that of the entire SSA region, surpassing it by 2016, reaching 11.7 per cent. Although there is substantial growth depicted since around 2000 in SSA, the global average is also increasing, partially influenced by this SSA growth. The financing of this expansion is a critical and intricate topic, entailing significant political and economic debates within the region.

Presently, national policies aim to enhance enrolment and completion rates in a bid to catch up with global standards. This aspiration, however, intersects with the backdrop of rapid population growth – SSA’s population as noted before now stands at 1.14 billion. Importantly,

this population growth is not solely concentrated in rural areas; urbanisation is on the rise, with urban populations accounting for nearly 42 per cent of the total, compared to just 14 per cent in 1960. This urbanisation trend underscores the increasing advantage of quality education in urban settings, affecting life outcomes.

This shifting landscape exerts pressure on governments to not only expand access to education but also devise sustainable funding mechanisms. Moreover, it necessitates a long-term perspective. While conventional considerations focus on graduates' immediate entry into the labour market and their subsequent earnings, the broader societal contributions of higher education unfold over a much longer horizon – according to Appiah and McMahon (2002) spanning 25 to 40 years. Therefore, funding policies and models must account for this extended timeframe and the comprehensive benefits accrued by society.

Additionally, the informal employment sector prevalent in many SSA countries, including South Africa, poses unique challenges. The lack of a structured taxation mechanism complicates the implementation of loan repayment schemes based on graduates' earnings. This underscores the need to address the characteristics of the informal sector within the higher education funding framework.

Furthermore, when evaluating the long-term perspective, non-market benefits of higher education (McMahon and Oketch 2013) such as its contribution to nation-building and societal development, become paramount (Oketch 2016; Oketch, McCowan, and Schendel 2014). While the civil service's nation-building role in the 1960s was unequivocal, the contemporary scenario has shifted. Many positions have been filled, and a substantial number of graduates do not immediately secure formal employment upon graduating.

In short, the graph in Figure 2 sheds light on the dynamic journey of higher education participation rates, highlighting shifts in Kenya and SSA, while also emphasising the need to consider the intricate interplay of factors such as rapid population growth, urbanisation, informal employment, and the far-reaching societal impacts of higher education. As SSA nations grapple with expanding access and ensuring sustainable funding, a comprehensive understanding of these factors becomes imperative.

While the idea of providing “free” university education is often viewed as an ideal of fairness, the practical implementation reveals a more complex reality. Many governments grapple with insufficient resources to support tens of thousands of young individuals seeking access to higher education. The substantial and burgeoning youth population in Sub-Saharan Africa (SSA) further exacerbates this challenge, necessitating the establishment of new universities to accommodate the increasing demand.

The imperative to address this demand brings about an intricate dilemma for SSA

governments. The establishment of new universities is a necessary step to meet the educational needs of the growing youth cohort. However, the sustainable financing of these institutions presents a formidable obstacle. This challenge is not one that can be swiftly overcome; rather, it is a persistent issue that is anticipated to persist for the next 15 to 20 years.

Illustrating this predicament, Figure 3 highlights the ongoing dominance of youth in the age group of 18 to 23 years of age. This sustained youth population ensures that the demand for education remains high and is projected to continue in the foreseeable future. As a result, the question of how to effectively finance this sustained demand becomes a paramount concern.

Share of the world's estimated population of 18–23 year olds by global region, 2015–2070

Source: Calderon, UNESCO <https://monitor.icef.com/2018/10/studyprojectsdramaticgrowth-global-higher-education-2040/>, accessed 4/4/2022

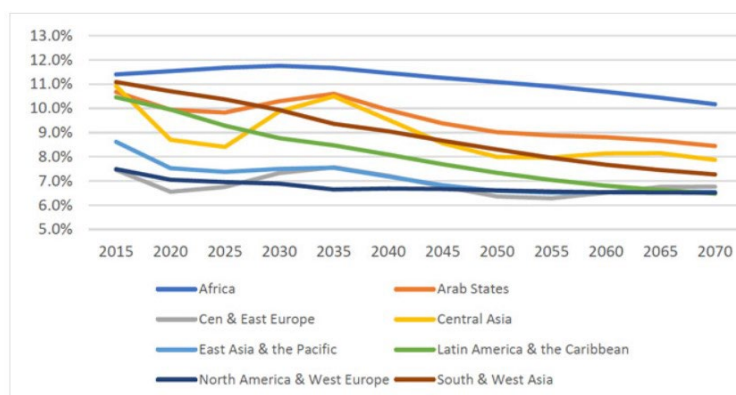


Figure 3: Share of the world's estimated population of 18–23 olds by global region, 2015–2070 (Source: Calderon, UNESCO <https://monitor.icef.com/2018/10/studyprojectsdramaticgrowth-global-higher-education-2040/>). (Accessed 4 April 2022).

While the notion of free university education carries an allure of equity, its realisation is intricate and multifaceted. The prevailing reality necessitates SSA governments to navigate the challenges of resource scarcity, expanding infrastructure, and sustainable financing in order to meet the persistent and growing demand for higher education.

Economic performance

The financing strategy for tertiary education is intricately intertwined with the economic trajectory of African nations. The substantial demand for education, as underscored by demographic trends, will significantly hinge on the economic performance of these countries. A pivotal aspect of this discourse is reflected in Figure 4, which illuminates the economic progress of African economies over time.

Sub-Saharan Africa has grown wealthier

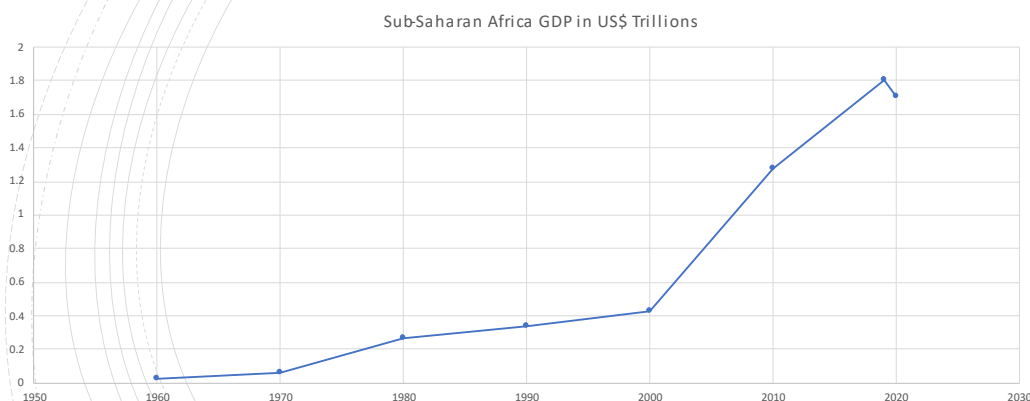


Figure 4: Sub-Saharan Africa has grown wealthier (Source: Constructed by author based on World Bank open data)

From the 1960s to 2020, African economies have exhibited a notable and consistent growth trajectory. Recent decades have witnessed a rapid expansion, culminating in GDP of approximately \$1.8 trillion as of 2022. This considerable economic growth is emblematic of the wealth present within Sub-Saharan Africa (SSA). This prosperity is inherently linked to some extent, it may be argued, to the active participation of the youthful demographic in the economy and the utilisation of the region’s abundant natural resources.

Central to the discourse is the assumption that a significant portion of this wealth nowadays remains within the African continent instead of being stashed in offshore banks, contributing to its overall economic potential. As the debate on financing tertiary education ensues, the notable economic progress in SSA provides an encouraging backdrop, suggesting that sustainable funding mechanisms can be attainable with prudent policies and strategic utilisation of the region’s economic resources.

In essence, the financial landscape for tertiary education is intricately tied to the economic dynamics of African countries. The positive economic growth experienced by these nations, as depicted in Figure 4, underscores the wealth potential that can be harnessed to support the burgeoning demand for higher education be it tax-payer funded or a combination of tax-payer funded and loan schemes.

Cost-sharing

While the concept of providing “free” higher education (HE) is deemed admirable and

synonymous with equity and justice, the reality, mirroring global trends, has presented substantial challenges due to overwhelming demand. Consequently, several countries in SSA have embarked on exploring alternative financing mechanisms to sustain their higher education systems. The case of Makerere University in Uganda can serve as a notable example of this paradigm shift, particularly in the context of marketisation and the concurrent rise of liberalisation policies advocated by Structural Adjustment Programs (SAPs) in the 1990s.

In 1992, Makerere University epitomised the prevailing norm of free university education. However, this landscape underwent a transformative shift in 1993 when the institution introduced a parallel program, commonly referred to as the “dual track model”. Under this model, students were divided into two groups: one group enjoyed fully taxpayer-funded education, benefiting from government support, while the other group assumed the responsibility of covering the full economic cost of their higher education. This marked a departure from the traditional approach and ushered in an era of increased private finance involvement in education financing.

Figure 5 (Court 1999) visually captures the consequential evolution of Makerere University’s enrolment. The institution’s reliance on private students – those enrolled in the parallel program paying full tuition fees – rapidly surged. Within five years, by 1998, approximately 70 per cent of the university’s enrolment comprised these self-financing students. This trend persists to the present day, further underscored by the continued prevalence of private enrolment, which has contributed significantly to the institution’s expansion.

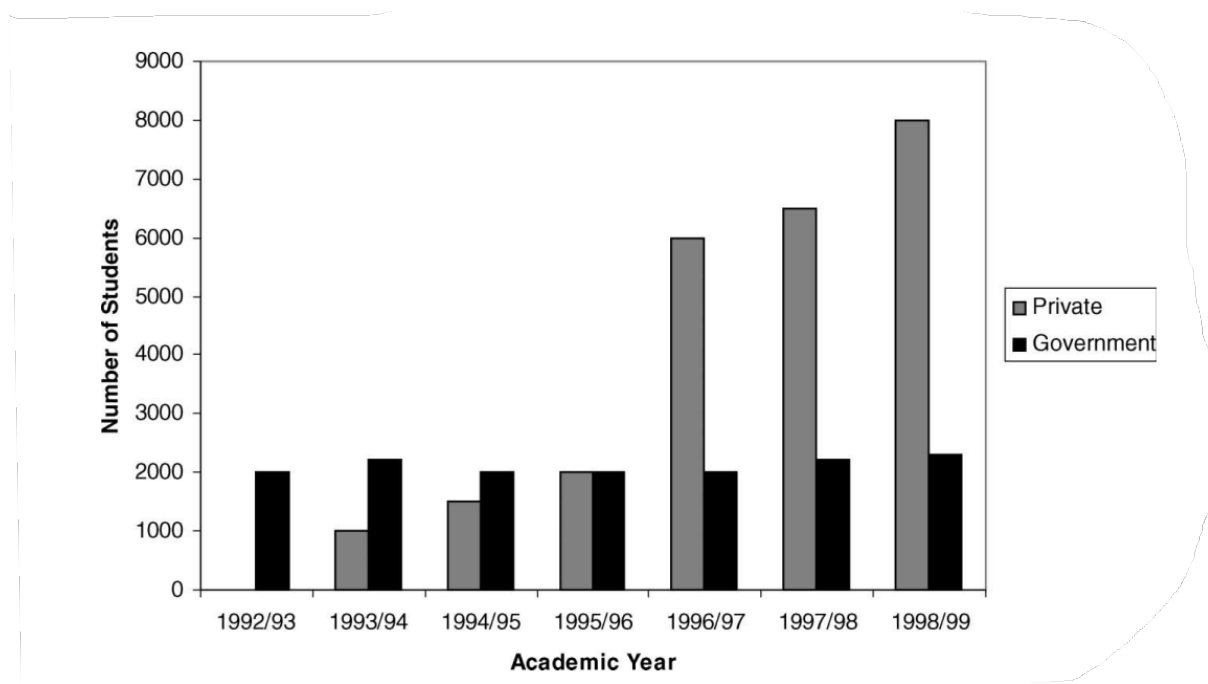


Figure 5: Makerere University private and government admission statistics for private and government-sponsored students. (Source of data is Court 1999)

The ramifications of this transition are twofold. On one hand, Makerere University's ability to expand and cater to the escalating demand owes much to the infusion of private financing. On the other hand, the state's provision of free higher education has stagnated and failed to match the rapid growth seen in private enrolment. This phenomenon is not unique to Makerere; it resonates across various African countries.

In essence, the trajectory of Makerere University's funding model exemplifies a broader trend in higher education financing within the African context. While the pursuit of free higher education remains a desirable goal, practical considerations have led to what governments like to call "innovative" approaches like the "dual track model," where private financing assumes an integral role in sustaining and expanding higher education opportunities. This evolution reflects the intricate interplay between economic pressures, demand dynamics, and the quest for equitable access to tertiary education across the African continent.

This prevalent approach has gained prominence across multiple countries, particularly evident in the parallel model that has gained traction. Under this framework, traditional free higher education for state-funded students is maintained, effectively coexisting with the parallel track that involves cost sharing. This model, aligns well with Bruce Johnstone's comprehensive analysis of cost-sharing mechanisms. Johnstone contends that this approach (Johnstone 1998), akin to the one pursued by Makerere, serves a dual purpose: it upholds the semblance of free higher education while also integrating market dynamics into the public sector.

Observing Makerere University's case, it becomes evident that market forces nowadays play a substantial role within the public HE sector. This nuanced interaction underscores the delicate balance between market involvement and the government's continued commitment to providing accessible education. Kenya, for instance, adopted a similar system in 1999, and although the model underwent criticism and subsequent review, it mirrors the trajectory observed in other Anglo-African countries. The overarching theme remains consistent: the landscape of tertiary education financing has transitioned away from universal state-funded free higher education. A distinct trend of strategic positioning has emerged across several Sub-Saharan African countries; the posturing is typified by the parallel track system, where one group of students assumes full financial responsibility for their education, while another group continues to benefit from government support.

Kenya Case

Examining the case of Kenya, the origins of student loan initiative as a cost-sharing mechanism date as far back as 1974. This initial scheme operated but recovery was very poor, effectively

making higher education “free” in the eyes of many Kenyans. Even government reports suggest that university education was fully funded by the government. However, in 1995 a more robust system emerged under the banner of the Higher Education Loans Board (HELB), which was established by parliamentary enactment. Basically, an explicit cost sharing was introduced.

The financial cost-sharing model introduced in 1995 between the Kenya government and households operated based on a calculated Unit Cost of Kshs. 120,000 per student for each program. Under this arrangement, the Government bore 58 per cent (equivalent to Kes. 70,000) of the total cost per enrolled student, while households were responsible for the remaining 42 per cent (amounting to Kes. 50,000). Households were assisted in meeting this cost through university loans provided by the Higher Education Loans Board. However, this funding approach had certain shortcomings which are noted in government document titled *Universities Fund, Kenya*.

The government document (Universities Fund Kenya n.d), notes that allocation of funds was determined using historical enrolment data, which resulted in significant variations in the average funding allotted per student across different universities. Notably, the model failed to account for the specific requirements of different course clusters and programmes, particularly those demanding higher financial support like medicine and engineering. Furthermore, the burden of the 42 per cent household contribution was viewed as onerous, especially for economically disadvantaged households. Beyond these issues, it is further noted that the cost sharing model suffered from both its insufficiency in providing adequate funds and its lack of sustainability when it came to the fair allocation of resources among public universities. This situation prompted the need for the establishment of transparent, equitable, and clear-cut criteria for distributing funds to universities in Kenya.

In accordance with sections 53 and 54 of the Universities Act of 2012, collaboration with public universities was deemed necessary to set maximum differentiated unit costs for their respective programmes. The Act also mandated the distribution of funds to universities based on the established criteria. The Act underscored that programme funding should align with the financial demands of the individual programmes, thereby requiring the adoption of the Differentiated Unit Cost (DUC) approach (Universities Fund Kenya n.d.).

Subsequently, in the 2017/18 fiscal year, the DUC funding model was put into practice. This involved considering the number of Government Sponsored Students (GSS) enrolled in undergraduate programmes within their respective clusters. Nevertheless, the implementation of the DUC strategy has encountered various challenges and emerging concerns, which encompass, but are not confined to, the following: i) A budget ceiling that fell below 80 per cent of the DUC, ii) Unreliable data availability, iii) Absence of a funding criterion for new

universities based on the DUC model, iv) Exclusion of postgraduate training from the DUC implementation, v) Absence of a criterion to support research funding, and vi) Lack of a clearly defined reporting mechanism and robust expenditure monitoring within universities (Universities Fund Kenya n.d.).

Challenges in Kenya's cost sharing scheme's implementation arise from poor recovery rates associated with time-based loan scheme (Oketch 2022), which can be attributed to various factors. As noted by Dearden and Nascimento, (2019), time-based loan schemes place unsustainable repayment burden on graduates leading to high default rates. One issue is the limited availability of well-paying jobs for graduates, hindering their capacity to fulfil repayment obligations. Additionally, administrative challenges have hampered effective loan recovery in many contexts, Kenya included. It is crucial to note that in Kenya's case this escalation is not solely indicative of unrecovered funds; the rise in outstanding amounts also correlates with the growing number of graduates benefiting from the programme as Kenya expanded the number of universities under the same scheme without raising the university funding. The Figure 6 illustrates disbursement and recovery.

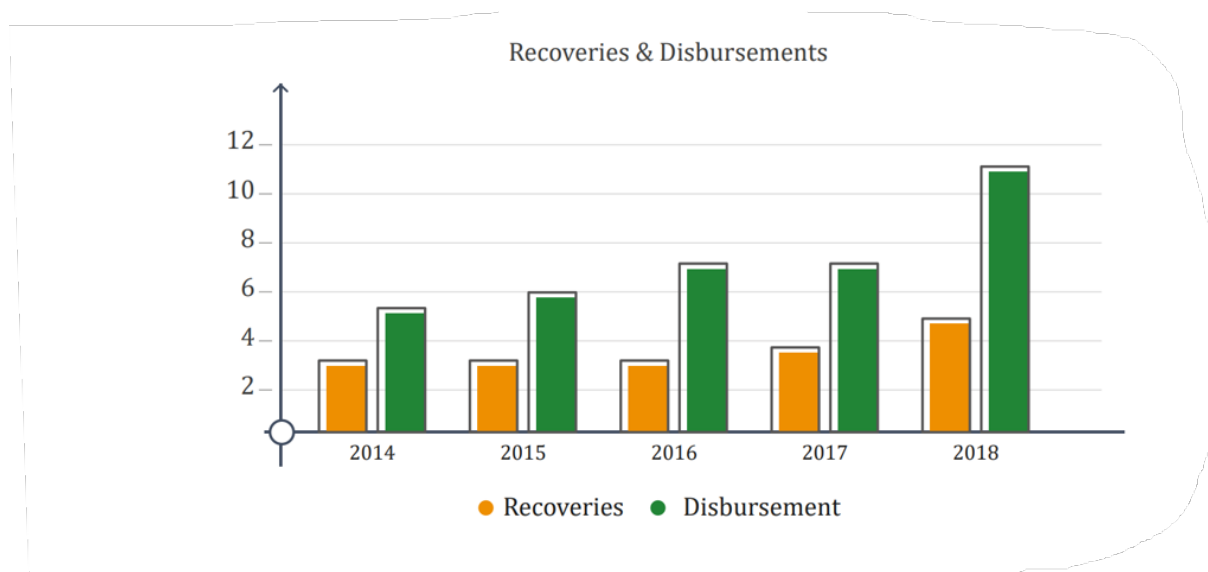


Figure 6: Kenya: Loan recovery “improving” but not keeping pace with disbursement (Source: HELB)

Efforts have been made, to enhance loan recovery rates for sustainability. The orange bar in the graph illustrates a gradual improvement in recovery rates since 2014. While progress is evident, it remains apparent that the system is not yet achieving a self-sustaining equilibrium, as recoveries still fall short of disbursements, leading to a persistent funding deficit.

Equity

Equity stands as a paramount concern when designing and/or evaluating various financing models for higher education. The heart of the matter revolves around determining which model can be both equitable and sustainable within the context (Oketch 2016). Examining higher education participation rates through a World Bank (2019) analysis in Figure 7, a stark discrepancy emerges in Kenya's case. Individuals in the wealthiest quintile are shown to have a staggering 49 times likelihood of pursuing higher education compared to their economically disadvantaged counterparts. This striking contrast prompts a crucial question for taxpayer "free" higher education: should those with fewer means bear the same financial burden for access to higher education as those more affluent? This query lingers, especially in the discourse surrounding the design of any cost-sharing scheme.

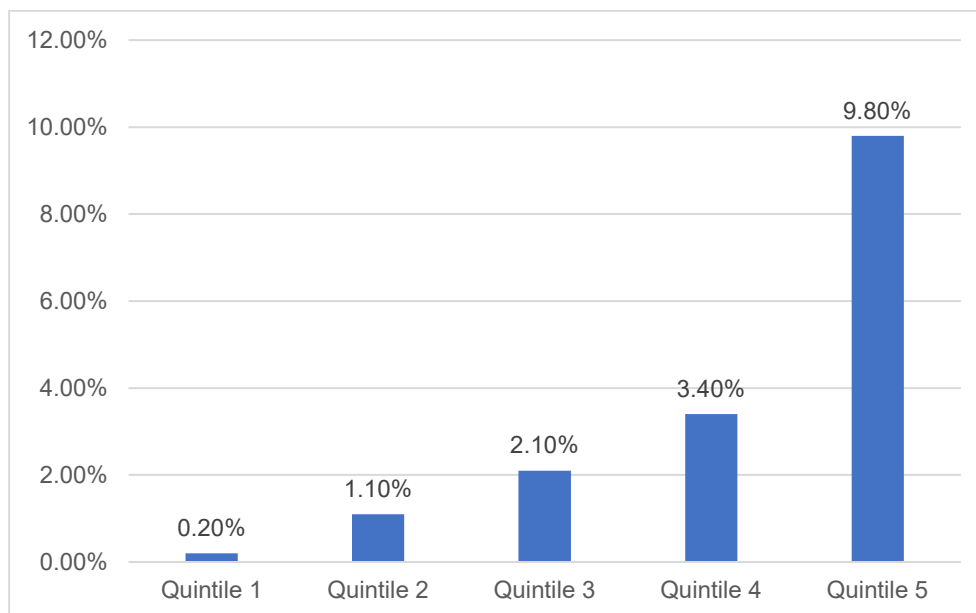


Figure 7: Enrolment rate by income quintile – Kenya (Source: World Bank Report 2019)

The prevailing imbalance raises concerns about the inequitable distribution of financing and access to higher education. Addressing this quandary requires a fundamental re-examination of how higher education is structured and funded. Can this disparity be mitigated through market-driven mechanisms, or is a comprehensive restructuring of government policies for free university education a more viable approach? The crux of the matter lies in devising a system that rectifies this glaring inequality, ensuring that higher education is not an unattainable privilege for the wealthy, but an accessible opportunity for all.

A case in point, the financing landscape in Kenya reveals a nuanced picture. The government provides funding segment represented in green (Figure 6), while tuition fees

constitute a direct payment and loans cover approximately 34 per cent of costs. This financing composition underlines the reliance on tuition fees and loans, a mix that underscores the complexity of funding higher education. However, it's important to note that the loan system in Kenya lacks an income-contingent structure. Graduates repay loans at a fixed rate of 4 per cent, functioning somewhat akin to a mortgage structure. The challenges of tracking and recovering loans are compounded by the prevalence of informal employment, making it challenging to gauge repayment capabilities accurately.

Kenya aspires to enhance participation rates and achieve the status of an upper-middle-income country. Currently standing at approximately 11.7 per cent participation, Kenya aims to raise this figure significantly. A comparison with lower middle-income countries, where participation rates hover around 24 per cent, highlights the existing gap (Figure 8). However, the viability of realising this goal while maintaining the current blend of tuition fees, loans, and direct government funding remains a pressing question.

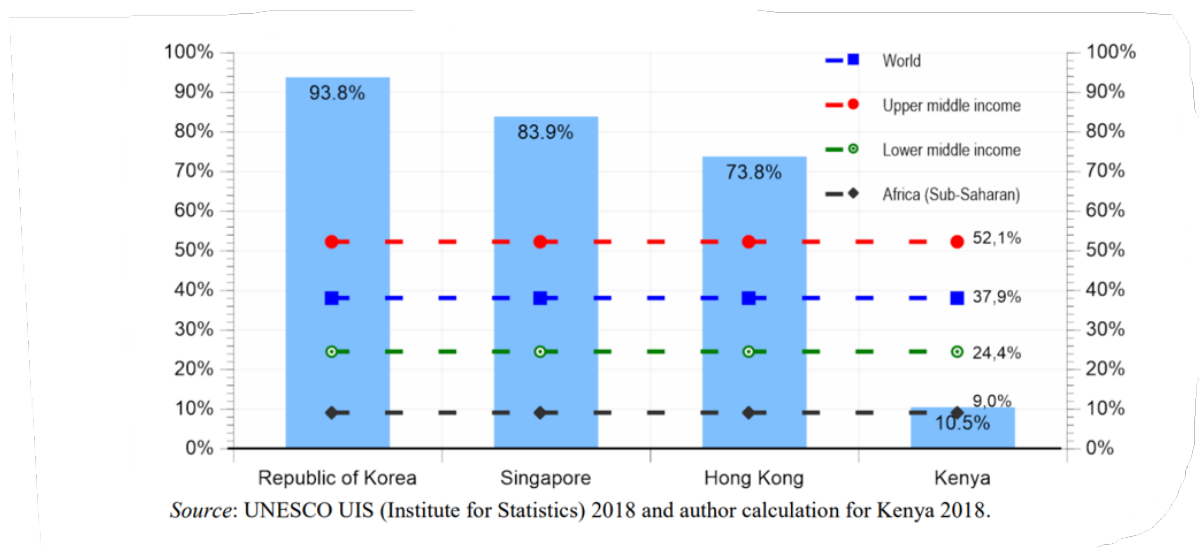


Figure 8: Gross enrolment in tertiary institutions (Source: World Bank Report 2019)

Nevertheless, the pursuit of an equitable and sustainable higher education financing model remains paramount. The intricate interplay between financial considerations, access, and the pursuit of educational parity underscores the necessity for an effective, well-structured framework. Balancing these factors is essential to ensure that the doors to higher education remain open for all, regardless of socioeconomic background.

The issue of subsidising higher education is a complex challenge that governments must grapple with. Kenya, with a population of around 52 million and a participation rate of only 11.7 per cent, there is undoubtedly room to expand educational access. However, achieving a

goal of 24 per cent participation (noted for a lower middle-income country which Kenya says it is) would require substantial governmental resources, all the while juggling other pressing demands like basic healthcare and primary education. Many arguments centre around the question of how much the government can allocate to higher education while also addressing broader societal needs.

Scholars examining these issues have proposed various models, each with distinct implications. One approach is universal free higher education, which can be costly but tends to benefit wealthier students disproportionately. On the other hand, the student loan model, akin to the mortgage repayment model, eases the strain on physical resources, provided there is adequate financial aid. Fees exclusively for parallel students, as depicted in the Makerere University case presented earlier, can also expand access, albeit primarily for wealthier individuals.

Another strategy is targeted free tuition (TFT), which is seen as potentially equitable but carries a significant cost. Under this approach, free tuition would be focused on a considerable segment of the population that demonstrates both financial need and academic potential. Those who can afford it would contribute to tuition costs directly, thereby balancing the financial burden and promoting a fairer distribution of educational opportunities. Table 1 illustrates these points.

Table 1: Sustainability and equity impact of various cost sharing schemes (Source: World Bank Report 2019, Table 12)

Cost-sharing modality	Financial sustainability impact	Equity impact
Free higher education for all	Very costly	Richer students more likely to benefit
Universal fees	Less demanding on fiscal resources	Equitable if financial aid available
Fees only for parallel students	Less demanding on fiscal resources	Richer students more likely to benefit
TFT	Costly	Potentially most equitable

Source: Elaborated by Jamil Salmi

A carefully managed cost-sharing approach to higher education financing holds promise even if some scholars may disagree with this. As illustrated by the Makerere case, such an approach not only widens access to university education but also ensures that the financially privileged contribute to university funding. The notion that equity hinges solely on completely “free” education is valid if the national affordability criterion is met. Yet, in situations where full funding is untenable due to government fiscal constraints including regressive tax system, cost-sharing mechanisms – especially those that defer costs to a later point – are shown to enhance access and success. However, the effectiveness of a cost-sharing model, particularly through a loan scheme, heavily depends on adequate funding. Presently, the Kenyan landscape indicates

a deficit in this regard, highlighting the need for careful consideration and implementation to achieve meaningful and sustainable outcomes.

The crucial element for a successful higher education loan scheme is its adequate financing. Without sufficient funding, the objectives of improving access, quality, and equity will fall short. The challenge of recovery is closely linked to formal employment rates, particularly in the context of a significant informal employment sector. Crafting a financing model that considers these factors becomes paramount. How can one design a system that accommodates those willing to pay but lack employment opportunities for repayment? This is a pivotal question that governments such as Kenya's must confront.

Based on my research into higher education finance, I suggest that income-contingent loans could hold promise for a country like Kenya. These loans would involve a percentage of earnings and could be forgiven after a specific period, say 25 years, considering the country's life expectancy. For instance, if a graduate begins employment at 23 years of age and the life expectancy is 65 years, the loan would be forgiven after 25 years if not fully repaid. If a graduate does not have gainful employment and low levels of income, loans repayment would not be required and will be written off after 25 years. While this approach may not be in place currently, it's a possibility worth exploring.

In the context where completely free higher education might not be feasible, a hybrid model seems practical. This could entail combining income-contingent loans with targeted free tuition in the public sector and means testing for maintenance grants. The reality is that the population is rapidly expanding, making it challenging to sustain entirely free higher education. However, as demonstrated by the graph depicting the growth of Sub-Saharan African economies to \$1.8 trillion, there are resources within the system that can be allocated toward higher education. It's not a matter of an absence of funds; rather, it's a matter of balancing these resources amid competing demands. Undoubtedly the situation presents a complex challenge, but there are viable solutions to explore. It requires careful consideration, innovative design, and a balanced allocation of resources to address the higher education financing conundrum in the region.

New funding framework

Oketch (2016) contends that while loans can indeed enhance access when utilised, they must possess certain attributes. Firstly, they should be substantial enough to cover all associated costs. Secondly, they must be designed to be affordable, featuring low or negligible interest rates and well-structured repayment schedules over time. Lastly, their recoverability should be ensured through an efficient mechanism, such as integration with the tax system. It is imperative

not to regard student loans as a universal solution to the financial complexities afflicting higher education in Kenya. Evidently, the United States has grappled with debt predicaments stemming from student loans, with instances of individuals in their 80s and 90s still carrying unpaid loan burdens that persist until their demise (Schirma 2022, cited in Bradbury 2023, in this Special Issue). In the rapid expansion of higher education institutions without adequate funding has led to a funding crisis, particularly affecting public universities. In response to this pressing issue, the newly elected governments in Kenya in 2022 took significant steps to address the situation by enacting higher education finance law, which became effective in 2023.

President William Ruto promptly established a Presidential Working Party on Education, which presented several recommendations to tackle the financial challenges in higher education. Subsequently, these recommendations formed the basis for the higher education finance bill, which was successfully passed by the parliament and signed into law by the president. The new law aims to establish a cost-effective higher education finance system, incorporating two key components: a) the implementation of a means tested and differentiated student loan system, and b) granting universities the flexibility to set variable fees for each of their courses.

The proponents behind Kenya's recently devised higher education finance framework, notably an economist working as government advisor David Ndi [@DavidNdi] (2023), asserts that the formula employed takes cues from practices observed in foreign nations. These international benchmarks likely allude to countries such as the UK and the USA. In contrast to the prior integrated approach, the new finance framework dissociates the admission and financing, rendering it a dual-stage process. The first step involves applying for admission to a higher education institution (university or vocational institute or teachers training college), while the subsequent step entails submitting an application for financial assistance.

As explained by Ndi, the university's website serves as a guide for students, directing them to potential sources of financial aid. Explicitly stated is that enrolment will only be possible if tuition fees have been secured. Hence, enrolment is now contingent upon fee payment. Nonetheless, the government will persist in providing financial support to the majority through a blend of scholarships and loans based on individual capabilities. As Ndi asserts, university fees have remained constant (not changed as a result of the new financing scheme) and that the new funding scheme necessitates universities to disclose the complete economic cost of each degree programme on their websites. The government official notes that fees universities are now publishing have always been part of their prospectus and are consistent with what self-sponsored students pay.

Under the previous funding model, the government pledged to fund 80 per cent of the cost

through a Differentiated Unit Cost (DUC). However, Ndi notes that the government has never fulfilled this funding target, starting at approximately 60 per cent in the first year and dwindling to below 40 per cent as the government admitted more students without a commensurate increase in funding. This situation, as described by Ndi, led to chronic underfunding of universities, a decline in quality, and a mounting debt of Sh60 billion. Universities, in response, adapted their practices to exploit the system, resulting in distortions in funding allocation and academic offerings. Essential disciplines like agriculture suffered, while universities artificially limited places in high-demand courses like medicine to admit self-sponsored students who paid full fees.

Ndi contends that the universities cannot be faulted for engaging in this behaviour, arguing that the government is responsible for perpetuating a facade of funding higher education while, in reality, the actions were undermining the universities and short-changing students. Within the new funding structure, the pivotal change is that universities will receive full fees (which Ndi notes is thanks to a 15 per cent negotiated bulk discount by the government). Moreover, this revised funding model is anticipated to safeguard university autonomy Ndi [@DavidNdi] (2023).

The approach being adopted is essentially a Flexible Scholarship and Loan Funding (FSLF) framework, supplanting the existing Differentiated Unit Cost Model (DUC). This model amalgamates scholarships and loans and is tailored to accommodate various student categories: i) Vulnerable, ii) Extremely Needy, iii) Needy, and iv) Less Needy. Scholarships and loans will be allocated across four distinct classifications of University/TVETs/TTCs students, as outlined in Table 2.

Table 2: Categories of students and their allocations

Student category	Scholarship (%)	Loans (%)	Household (%)
Vulnerable	82	18	0
Extremely Needy	70	30	0
Needy	53	40	7
Less Needy	38	55	7

Source: Government of Kenya.

CONCLUSION

Some scholars argue that the concept of “free” higher education can be misleading, as it fails to account for the significant economic returns that graduates often enjoy. Therefore, cost-sharing presents a more realistic model as it acknowledges the value of higher education for both individuals and the economy or society as captured by the human capital life-cycle

conceptual framework (Figure 1). Kenya government has bought into this argument. However, the challenge arises with loan systems, which have their own set of issues, including how to recover the costs when graduate level jobs are increasingly limited. There is growing interest in the idea of a graduate tax, or an income-contingent contribution. Proponents of such a mechanism argue that the tax system is adept at handling issues of inequality and fairness hence graduate tax, or income contingent contribution would be fair especially considering the proven efficacy of the tax framework in ensuring equity.

The evidence in Kenya's case especially based on Figure 7 indeed seems to support the argument that free provision alone might not inherently lead to expanded access and equitable outcomes. However, implementing a functional income-contingent contribution or "graduate tax" system is complex and relies heavily on a well-organised formalised market. In the case of Kenya, the presence of a large informal employment sector poses challenges in accurately capturing income and enforcing such a tax system. The government has been making efforts to address this, such as introducing a unique identification mechanism to track transactions and informal income. Yet, due to the substantial proportion of young people in the informal sector, unemployment rates, and the unpredictability of informal employment, implementing a graduate tax will face practical limitations.

In other African countries, a similar situation is observed, where a significant portion of the population is engaged in informal and precarious employment. This makes it challenging to accurately assess income and implement effective tax mechanisms. While there has been expansion and utilisation of higher education since the introduction of liberalisation, the process of developing a functional cost-sharing system, like education loans, is gradual and involves improving recovery mechanisms over time. It is plausible that with further refinement and adaptation, such mechanisms could become more effective and contribute to financing higher education in a more equitable manner.

The DUC higher education financing system in Kenya which is being phased out gradually does not incorporate a targeted tuition fee structure; instead, all admitted students pay a certain tuition amount and have the option of obtaining a loan. However, the data clearly shows that the existing system still results in significant inequities in access to higher education. The question of how to ensure equitable access and address these challenges has led to a new financing framework in Kenya that has been implemented affecting those joining higher education from September 2023 with some in support and others against it. The new approach is somewhat a targeted approaches like TFT to address the disparities in participation rates and provide meaningful opportunities for students from all socioeconomic backgrounds.

Implementing a targeted free tuition programme in an economy with limited income

statements and data, can indeed pose challenges. Implementing such a programme would require a comprehensive and robust data collection and verification system to accurately determine the eligibility of students from disadvantaged backgrounds.

It's important to note that implementing such a programme requires careful planning, regular stakeholder engagement, and investment in data infrastructure to ensure accurate and fair eligibility assessments. Additionally, the programme design should consider mechanisms to update and verify eligibility over time to accommodate changing economic circumstances of families. At present, it seems in Kenya case, that differentiated costing has been implemented and HE is now in the marketplace. The primary goal should be to prevent burdening graduates with loans that they might never be able to repay within their lifetimes, a situation reminiscent of what has been observed in the United States. Without an income-contingent component and a predetermined write-off period, the transformation of higher education in Kenya, while beneficial, could also introduce new challenges.

NOTE

1. This article is based on presentations made separately at Oxford University, Centre for Global Higher Education and Cambridge University, REAL and KPP joint seminar in 2022.

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