Higher Education Finance as a Public Good in Kenya

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Abstract

This article discusses the transformation of the higher education financing model and how this relates to the concept of higher education as a public good in the context of Kenya. Following independence in 1963, the new Kenya government – like most countries in sub-Saharan Africa that attained independence in this period - considered the establishment of a university to be one of the symbols of a republic and of national advancement. The government valued the public role of university education during this early phase of Kenya as a sovereign nation, even when access remained highly restricted. But, equally, the private benefits of being a university graduate were evident to the Kenyan citizenry. For two decades, Kenya had only one public university – the University of Nairobi – but after 1984 the state rapidly expanded higher education, partly in response to demand. Several universities have since been established, both public and private. Concurrently, the government has pursued a cost-sharing financing model to support this rapid expansion, which is contrary to the notion of higher education as a public good to be provided free of charge. This article examines this transformation of the financing model together with higher education as a public good and concludes that each has influenced the other in Kenya's context.

Keywords: Kenya, higher education finance, public good, human capital, equity, student loans

Résumé

Cet article traite de la transformation du modèle de financement de l'enseignement supérieur et de son lien avec le concept de l'enseignement supérieur en tant que bien public, dans le contexte du Kenya. Après l'indépendance en 1963, le nouveau gouvernement du Kenya – comme la plupart des pays d'Afrique subsaharienne qui ont accédé à l'indépendance

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à cette époque - considérait la création d'une université comme l'un des symboles d'une république et de l'avancement national. Le gouvernement appréciait le rôle public de l'enseignement universitaire au cours de cette première phase du Kenya en tant que nation souveraine, même lorsque l'accès restait très restreint. Mais, également, les avantages privés d'être un diplômé universitaire étaient évidents pour les citoyens kenyans. Pendant deux décennies, le Kenya n'avait qu'une seule université publique, l'Université de Nairobi, mais après 1984, l'État a rapidement développé l'enseignement supérieur, en partie en réponse à la demande. Plusieurs universités ont été créées depuis ce temps-là, tant publiques que privées. Parallèlement, le gouvernement a adopté un modèle de financement avec partage des coûts pour soutenir cette expansion rapide, ce qui est contraire à la notion de l'enseignement supérieur en tant que bien public à fournir gratuitement. Cet article examine cette transformation du modèle de financement ainsi que l'enseignement supérieur en tant que bien public et conclut que chacun a influencé l'autre dans le contexte du Kenya.

Mots-clés : Kenya, financement de l'enseignement supérieur, bien public, capital humain, fonds propres, prêts pour les étudiants

Introduction

Higher education matters for individual life chances and society (McMahon and Oketch 2013; McMahon and Oketch 2010; McMahon 2009), so this makes it a 'public' good, although some may argue that this does not preclude it from also being a 'private' good. National education policies across the world seek higher enrolment and completion rates, sometimes on the basis that higher education is a 'public' good and on the basis that it is a 'private' good. All over the world, higher education has become more expensive and how to finance its expansion has generated debate and raised questions about which funding model or combination is economically feasible and sensible, practical and moral, within any given context (Oketch 2016). The taxpayer-funded model seen as 'free' can support effective but elite universities in small numbers, especially if applied with fiscal rigour.

Widening participation in higher education is said to require a greater diversification of funding sources or a shift in some of the costs to those students who make use of it (Barr 2004 in Oketch 2016). Human capital theory is instrumental in this debate, in part because it puts a monetary value on the knowledge, skills and competencies of individuals, based on the amount of education they have received through rate-of-return analyses (Psacharopoulos and Patrinos 2004; Psacharopoulos 1994). According to human capital theory, when young people enter higher education, they are making a short-term investment in opportunity cost, tuition fees and living expenses while at university, and anticipate long-run benefits in the form of higher earnings after graduation. There are also spillover benefits for the rest of society (Goodman and Kaplan 2003; Keller 2006), including future generations (McMahon and Oketch 2010).

Ultimately, human capital theory indicates that higher education confers a wide range of personal, financial and other lifelong benefits; likewise, taxpayers and society derive a multitude of direct and indirect benefits when citizens have access to higher education (Sandy et al. 2010). The question then is, who should pay for its costs, especially its expansion? As a public good, it should be free, but since human capital theory embodies both 'private' and 'public' aspects it has helped to generate this complex debate on the publicness of higher education, especially when evidence based on a rate-of-return analysis shows that a great majority of its benefits are private. But this is because a rate-of-return analysis largely defines benefits as private economic returns in terms of earnings and productivity in the labour market, while ignoring many of the social benefits beyond earnings that are important to society and often not easy to measure. To this, Becker (1993) once said that the theory of human capital arouses passion to the extent that even people who generally are in favour of the broader benefits of education often dislike the phrase 'human capital', partly because they fear that the theory emphasises the 'material' effects of human capital over its 'cultural' effects. Nevertheless, Becker's call for more weight to be given to the 'cultural' effects of human capital did not receive much attention because economic enrichment dominated the purpose of higher education in many contexts.

Schultz (1961, 1963) is credited with coining the phrase and developing human capital theory, and he too emphasised its contribution to economic productivity. Over time, in many countries, government policies that draw on human capital theory have predominantly defined the benefits of higher education as private economic enrichment. As Marginson (2011: 414) has argued, when this happens, 'the rationale for public good activity vanishes, along with the public funding that supports it', and what follows is the growth of market forces in higher education whereby costs are shifted to students and their families through different configurations of cost-sharing. As this happens, the aspects of higher education benefits that are seen as 'public' or as 'private' create tensions between claims that higher education benefits the entire society and so should be free of charge and the counterargument that private individual benefits are substantial and so individuals should contribute to the cost of their higher education. The concern is that the 'public' is being lost (Zemsky 2003) as benefits are increasingly defined by government policies as private economic returns, which has led some scholars to lament that higher education is not being treated as a public good and social service (Tilak 2009). But to what extent is higher education a public good?

Samuelson (1954) defined public goods as those goods that are nonexcludable and non-rivalrous. Non-excludability simply means it is commonly available to all, and non-rivalrous simply means that one person's consumption of the same good does not affect its supply to others. Before Samuelson's public goods theory, public goods were normally considered to be goods that were produced in the public sector (Holcombe 2000: 273). Samuelson defined a good as public if it had one or both characteristics of joint need in consumption and non-excludability (Samuelson 1954). His original definition covered only the characteristics of jointness in consumption, but economists writing after him have also recognised nonexcludability as a key element of publicness. As such, a good becomes nonexcludable if, once produced, the producer cannot prevent other people from consuming the good, a criterion that higher education should fulfil for it to be regarded as a pure public good. Non-excludability allows people to consume the good without paying for it, thus creating a 'free rider' problem. As such, the good will be underproduced in the market, which creates a role for government production (Holcombe 2000: 274).

Knowledge is considered to be almost a pure public good (Stiglitz 1999) and since knowledge is said to be the unique claim of higher education (Marginson 2011), higher education is a public good beyond doubt (Tilak 2009). But despite this recognition and the fact that higher education is not universally available and requires academic qualification in prior levels of education, the question of equity and the role of cost-sharing in extending and redistributing educational opportunities is frequently emphasised in the debates on the extent to which higher education should be treated as a public good. These debates centre on whether higher education should be accessed by all free of charge or whether it should also be defined as a 'private' good because some of its benefits are solely to the individual. Some even go further to argue that free higher education restricts access (Barr 2004), which would suggest that it is not a pure public good as such. For others, such as Tilak (2009), even if some people are excluded from higher education, that does not invalidate its publicness, and it is not possible to provide efficient and equitable higher education through market mechanisms (including, presumably, models of cost-sharing).

In this regard, as a public good higher education should be accessed free of charge by all, although 'all' is never quite all since access to higher education is not universal. The main argument Tilak advances is that, for a public good such as higher education, private demand would fall severely short of socially optimal levels under market provision, so considerations of the role of the market should not be entertained for higher education.

Even if admission is rationed, as is usually the case given the criteria for admission into higher education institutions, the distribution of the social benefits associated with higher education cannot be rationed; they benefit everyone in society (Tilak 2009). It is also not generally desirable to ration admissions to higher education, even when there are admission criteria (Weisbrod 1988), although this raises the question of the quantity of higher education that can be made available given that it is normally not universally provided and attendance is not a requirement.

A further problem arises once the desired quantity is considered a normative issue, because it leads to questions such as, 'How much and what kind of educational equality is desired [taking into consideration the context]? How much social resources should be allocated to these objectives, given other objectives?' (Marginson 2011: 417). The answers to these questions suggest that how higher education is classified as a public good may lend itself to context and that what is a public good is not absolute. As Tilak puts it, 'it can depend upon government policies, market conditions, level of development and political realities' (Tilak 2009: 451). But does this suggest that the concept of public goods can be open to interpretation? Let's say it is, then the interpretation, in Tilak's view, 'should consider all aspects including the intrinsic nature of the given good, the public goods it produces [besides itself being a public good], the social purpose it serves, and the limitations of markets or what is widely known as market failures in the production of such goods' (Tilak 2009: 451-452). Marginson (2011: 413) has also addressed this issue by arguing that 'the public character of higher education is not so much a function of the timeless character of universities but grounded in social practices', and that as such 'higher education institutions are more or less "public" and "private" according to the policy and funding configuration chosen by them' (ibid.), which would suggest that the publicness of higher education is determined by policy.

There are many debates on this issue, but Tilak is among those who argue that higher education is a public good beyond any doubt and should not be subject to any form of market forces. On the contrary, Barr (2004, 266) while not commenting specifically on the publicness of higher education, argues that the 'equity objective is not free higher education, but a system in which no bright person is denied a place because he or she comes from a disadvantaged background'. Many low- and lower middle-income countries recognise the contribution that higher education makes to national development and that, by nature, higher education (like other levels of education) is shaped by policies that are pursued by a government. So higher education can appear 'private' if government policies are favourable to market forces in higher education, and 'public' if the policies are totally against market forces being involved. Because it is policy-determined, higher education as a public good, like other public goods, does not just simply emerge in a vacuum 'but under specific conditions that enable and limit what can be achieved' (Marginson 2011, 420). So, what is frequently witnessed are government policies that seek the optimal balance necessary to expand and finance higher education as a public good through the taxpayer while also recognising that higher education generates private benefits, which means that some of its costs should be shifted to students and their families.

This issue is even more complex in low-income contexts because of low rates of access to higher education and the desire to accelerate access opportunity. At the same time, increasing access through taxpayer-funded higher education, without having realised universal access to earlier levels of education, raises issues of equity and equality of opportunity (Oketch 2016), and questions such as 'Whose public good?' and 'In whose interest?' (Marginson 2011: 417) are unavoidable. This question is even more critical in contexts where there is no provision of universal quality basic education. In this context, it matters how higher education benefits are defined. As Marginson (2011: 414) put it, 'when the great majority or the only benefit of higher education are defined as private economic enrichment, the rationale for public good activity vanishes, along with the public funding that supports it'. This suggests that the notion of higher education as a public good and higher education finance can influence each other.

Kenya has been seeking to expand higher education access, possibly with consideration of higher education as a public good, while at the same time taking into account how to finance it. Since 1973, the Kenya government has used student loans as a means of extending and redistributing higher education opportunities. This paper considers how Tilak's statement (2009), that higher education must be completely free of charge as a public good even when it excludes others, and Barr's diametrically opposed argument (2004), that free higher education is bad for access, play out in the context of Kenya, a country that initially took a cautious step towards expanding higher education but early on introduced student loans and used elements of market mechanisms to increase access.

The rest of the article is organised as follows. The second section examines human capital and the concept of higher education as a public good. The third section pays attention to rates of return and the public good. The fourth section focuses on the performance of the student loan scheme in Kenya, while the fifth section summarises how finance configurations and public good processes have influenced each other. The sixth section offers the conclusion.

Human Capital and Higher Education as a Public Good

Conceptually, the human capital life-cycle framework includes estimates of earnings and private and social non-market benefits derived from education. These benefits are enjoyed throughout the remainder of the life cycle (McMahon 2009, 2018; McMahon and Oketch 2010). The earnings or Gross Domestic Product (GDP) are measured as market-based returns. But since graduates use their human capital productively in the community as well as in the household, their higher education generates benefits that are referred to as non-market benefits. Therefore, there are three kinds of benefits: time spent on the job-generating market benefits (such as wages and GDP); time spent in household production at home generating private nonmarket benefits (such as better child health, better spousal health); and time spent in the community generating social benefits to others (such as better civic institutions, greater human rights), which extend to future generations (McMahon and Oketch 2010).

Taking social benefits into account suggests that higher education should be regarded as a major instrument in shaping society, including culture and democracy, and in this regard it is a public good beyond doubt (Tilak 2009). But decisions by individuals and their families to pursue higher education tend to be made without anticipating these social benefits, partly because they are indirect and not easy to measure. So, it is important how a government defines the benefits derived from higher education, which requires all three types of benefits (to the individual, household and community) to be added together when governments develop policies for higher education finance. Whereas private benefits in the form of wage earnings have been dominant in the rate-of-return analysis, the non-market benefits are substantial and important, and extend to future generations. As McMahon (2018) points out, the non-monetary social benefits and their importance for regional and national development are poorly understood: 'there are important implications for public funding policies, for academic policies, for rates of growth and development over time, and for institutions supporting democracy, human rights, and political stability that have not been systematically explored (2018: 1). But they are far greater than the market benefits an individual enjoys privately.

At the same time, 'free' university education is seen by some economists as capable of supporting effective but narrow access to university education, which ends up excluding many. Free higher education for all is considered by some to be very costly and that richer students are more likely to benefit from it. Table 1 illustrates this point.

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
Targeted free tuition	Costly	Potentially most equitable

Table 1: Sustainabili	ty and Equity	Impact of Various	Cost-Sharing Schemes
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Source: World Bank, 2019

Students from rich and poor economic backgrounds have both defended free higher education. Those from a poor background see higher education as crucial for their social mobility and believe that making it free is essential for them to access it. Richer students have defended free higher education based on meritocracy and to preserve quality, suggesting that they believe market forces erode the quality of higher education (Oketch 2016). Barr (2004) and Barr et al. (2019) have argued that higher education should be 'free at the point of use', which is a different phenomenon from totally free higher education. When higher education is 'free at the point of use', it means that there would be no upfront cost barriers for anyone who is academically qualified and desires to pursue higher education.

One way to realise this 'free at the point of use' model is to allow student loans to play a role in extending and redistributing educational opportunities. This model exists in many countries as governments accept that a higher education qualification confers benefits to the individual, who in turn should contribute to its financing by paying some or most of its cost. A financial model that makes higher education 'free at the point of use' in a context where free higher education is considered unaffordable, is perhaps a win-win situation because it enables a government to widen participation, which is socially desirable goal, while shifting some of the costs to the student without the burden of upfront payment by the student. Along with means-tested aid, making higher education free at the point of use (which is a deferred payment loan scheme), its proponents argue, is a policy option that can better achieve equity objectives while accelerating access for all population groups. There are different types of higher education loan schemes, which include fixed-amount repayments; percentage of earnings repayments; income-based or mortgage-type loans; and incomecontingent repayments (Barr et al. 2019; Oketch 2021). Income-contingent loans (ICL) are viewed favourably for the 'free at the point of use' model because repayments depend on the debtor's future income (Barr et al. 2019), and even when a person's income rises, the repayments increase but cannot exceed the cap defined by the ICL policy.

In many countries, higher education is not universally available. Its demand is driven by the labour market or requirements for higher education qualifications. Even families and students are conversant with the increases in earnings and job prospects that higher education brings - what Becker (1993) referred to as the material effects of human capital. Many systems of higher education are selective, such that only academically qualified students are enrolled in higher education. Often, the majority of these students are from middle- and higher income households, with many young people from poor backgrounds excluded. Some economists argue that this selective model does not expand access, whereas models of cost-sharing can aid the expansion of access by shifting some of the costs to students and their families. The models of cost-sharing include: 1) making higher education 'free at the point of use' (study now, pay later) through student loan schemes; 2) allowing students who wish to enrol to pay higher fees directly (pay-as-you-go schemes). For low-income countries, the argument goes, higher education should be made more self-sustaining by recovering more of the public costs and reallocating some of the tax revenue to primary, secondary and other areas of education with the highest social rates of return (McMahon 1988: 135). This should be done along with developing a credit market for education together with selective scholarships, especially in higher education (ibid. 135–136). These suggestions have been implicit in Kenya's higher education finance modalities since 1973, which are the focus of the next sections.

Rate of Return and the Public Good in Kenya

There is a large body of literature on the development of higher education in Kenya. Much of it consists of policy analysis, studies of access to higher education and the changing nature of supply and demand more generally from a policy perspective. Some examples include literature on higher

education finance (Gudo 2014; Johnstone 2006; Oketch 2016; Otieno 2004) and rate-of-return analysis (Kimenyi, Mwabu and Manda 2006). Rate-of-return analyses focus on the extent to which an education system yields returns to individuals and the economy that justify the resources invested in the education system. For the individual, estimates of returns measure the benefits to education in the form of wages. There are private rates of return, which include the costs and benefits captured by the individual, whereas social rates of returns are benefits and costs for the society. Rate-of-return analyses can be useful in evaluating broad education policies (Kimenyi et al. 2006), but they have also been criticised severely (Bennell 1996) as being narrow. Table 2 captures rates of return for primary and tertiary education in select countries, including Kenya. Worldwide, primary education is shown to have higher rates of return, but those of tertiary education are also considerable, at 19 per cent. In Kenya, a study by Kimenyi et al. (2006) showed that tertiary education had a high rate of return (25.1 per cent) whereas primary education yielded only 7.7 per cent.

Country/Region	Primary Education %	Tertiary Education %	Authors
World	26.6	19.0	Psacharopulos and Patrinos 2004
Papua New Guinea	6.0	9.2	Gibson and Fatai, 2006
Philippines	9-10	17.0	Schady 203
India	2.4	10.3	Dutta 2006
Kenya	7.7	25.1	Kimenyi, Mwabu and Manda 2006
Nigeria	2-3	10-15	Aromolaran 2006
Ethiopia	25.0	27.0	World Bank 2003

Table 2: Education Rates of Return

Source: World Bank 2009: Accelerating Catch-Up: Tertiary Education for Growth in Sub-Saharan Africa, 7

In Kenya, like most countries in the world, higher education is not completely a matter of personal choice because schooling spaces at the secondary level are far greater than the number of places available at the universities. Ability as measured by academic performance in end-of-school examinations is the main criterion for selection into higher education. Table 3 shows trends in performance in high school and university placements in recent years. The data in the table indicates poor performance in the Kenya examination that enables admission to university. The minimum entry requirement is C+ ---in 2017, only 11.48 per cent of the candidates who took the examination obtained this grade. So, 88.52 per cent did not qualify to join university or attained less than a C+ grade, indicating overall poor performance in the examination. The performance in the previous year (2016) was only slightly better, with 15.57 per cent qualifying to join university. The performance in the other two previous years (2014 and 2015) was much better in comparison with 2016 and 2017. What accounts for this difference is that, since 2016, there has been a stricter process to prevent examination leaks and the examination itself could have become harder. The other significant factor is that, in 2017, all those who qualified were placed by the Kenya Universities and Colleges Placement Service (KUCCPS), which means they were all admitted into public universities under the government loan scheme (study now, pay later). In the previous years, less than 50 per cent of those who qualified to join university were placed by KUCCPS under the government loan scheme, leaving the rest who wished to join to do so through a parallel (pay as you go) programme scheme, whereby they were admitted to the public university but paid the cost upfront on their own, or they could choose to join private universities.

	Form 4 Total Enrolment	Number Qualified (C+ And Above)	Percentage of Candidates with C+ And Above	Number of Students Placed by Kuccps	Percentage of Candidates Placed by Kuccps
2014	482,133	149,717	31.05	56,986	46.84
2015	521,240	169,492	32.52	67,790	46.09
2016	571,161	88,929	15.57	74,046	44.79
2017	610,501	71,018	11.48	71,018	100.00

Table 3: Trends in Kenya Certificate of Secondary Education (KCSE)Performance and University Placement

Source: World Bank, 2019

The World Bank's research on the revitalisation of higher education (World Bank 1995, 1988) contributed to the development of a cost-sharing framework for education in low-income countries, including Kenya where a loan scheme has been operating since 1973. The reforms that were advocated by the Bank recommended measures such as student loans, and the

immediate shifting of room and board costs to students and their families. Psacharopoulos and Woodhall, in the 1980s, provided analytical evidence that social rates of return were higher for basic education, taking into consideration the social goals of this level of education (Psacharopoulos and Woodhall 1985). McMahon (1988: 136) suggests that with respect to the potential for greater efficiency, overburdened tax systems limit the expansion of all education and prevent economies of scale in higher education, and in doing so keep unit costs higher than they need to be in higher education (e.g. Psacharopoulos et al. 1986: 55). With rapidly increasing numbers of 'qualified' students finishing high school, the capacity to meet the effective demand at the public universities becomes severely strained in this scenario, and private sector institutions sometimes are hastily organised to fill the gap.

Kenya had already introduced a university loan scheme in 1973, possibly with these aims of extending and redistributing educational opportunities. At the time this did not expand access, but in later years a greater use of cost-sharing can be associated with the expansion of access to higher education. This point is developed later in the paper. The 1973 loan scheme operated as a low-key loan scheme due to poor loan recovery. In the end, it did not expand university education substantially, although the University of Nairobi itself expanded by adding more faculties and establishing constituent campuses. The loan system was reformed in 1995 when the Higher Education Loans Board (HELB) was established as a new state corporation with the purpose of supporting undergraduate students with loans based on individual needs and the Board's resources. The loans range from KES 35,000 to a maximum of KES 65,000, and are subject to an interest rate of 4 per cent per year. Students are expected to start repaying their loans within one year of the completion of their studies (World Bank 2019: 29).

The Student Loan Scheme and its Performance

Figure 1 compares the non-paying loanees in the pre-HELB period (1970–1995) and the post-HELB period (1996–2017). As of 2017, there were a total of 179,692 non-paying loanees comprising 27,926 from the pre-HELB era and 151,766 in the post-HELB era.

The variation in the aggregate trend between pre-HELB and post-HELB is an outcome of the greater participation in undergraduate education that followed the rapid expansion of university places, and suggests that borrowers are experiencing worse outcomes than the earlier group and therefore are unable to repay the loans. This situation indicates that the taxpayer burden has expanded as higher education participation has increased relative to jobs available for these graduates. But, at the same time, greater expansion with potentially many social benefits of a non-monetary nature may have resulted from this expansion. These benefits constitute the public good aspect of higher education (Tilak 2009). Appiah and McMahon (2002) pointed out that these benefits to communities are not evident when only a few individuals participate in higher education. They further emphasise that the social benefits that derive from higher education can take between twentyfive and forty years to be fully embedded into the society. This suggests that Kenya is on a positive trend in expanding higher education, if these nonmarket benefits are to be enjoyed by future generations. Failure to expand now would mean that the future generations in twenty-five or forty years' time will be set back by this number of years if expansion were to wait. However, the trend in non-payment of the loans suggests that the idea of cost-recovery is complicated in contexts where graduates are unable to secure jobs to be able to repay their loans.



Figure 1: Number of Non-paying loanees (Pre HELB and Post HELB) Source: HELB, Kenya, 2019

Figure 2 further shows how the number of non-paying loans has grown from 1971 to 2017. This confirms that loan recovery has been weak. One reason is that the loan scheme and other subsidies in Kenya are not selective enough when admitting students into university. This is due to little attention being paid to developing a financial needs analysis. Greater selectivity is required in order to ensure that there is no exclusion of academically qualified students from poor families and to make it possible for those students from economically more able families to contribute to their higher education. All students who are admitted under what is known as the 'government scheme' are automatically enrolled in the HELB scheme irrespective of their family's ability to pay, which aligns with making higher education 'free at the point of use'. Nevertheless, if these loans were to be recovered more effectively, then the objective of equity and the role of student loans in extending and redistributing educational opportunities could be realised in Kenya because it would mean that more resources would be generated by the recovered loans.



Figure 2: Growth in non-paying loanees (1970-2017) Source: HELB, Kenya, 2019

Recovery rates are also low because many graduates face a tough labour market, so they take longer to secure the long-term stable employment they need to repay their higher education loans. This situation is sometimes made worse by a government that expects graduates to be 'job creators' instead of 'job seekers'. Designing an efficient and equitable system for cost-recovery will remain challenging in Kenya's context if graduate employment does not rise quickly. An efficient and equitable loan scheme will be dependent on the extent to which Kenya's economy grows and how quickly it generates graduate-level jobs. Thus the existence of a loan scheme on its own does not guarantee equitable access to higher education.

Figure 3 shows the socioeconomic distribution of students in higher education. It confirms that Kenya's higher education system is extremely socially unequal despite the availability of financial aid through HELB. The disparity ratio is 49 (9.8 divided by 0.2), which means that the richest income group is 49 times more likely to access higher education than the lowest

income group. This is not a problem that starts at higher education, but is traceable to primary and secondary education where poor students progress less well than those from the richest income groups (World Bank 2019).



Figure 3: Enrolment Rates of Kenyan Students by Income Quintile (2016) Source: World Bank, 2019: 30

Besides HELB, Kenya implemented a pay-as-you-go scheme around 1998/1999 as a second model of higher education finance, and to expand access. It became known as the 'Parallel Programme' or 'Module II', whereby a cohort of students were admitted into the public university and offered parallel teaching of courses that were already being offered in the mainstream programmes, but they paid the market rate cost of their university education upfront. These students were largely from families who could afford to pay the 'parallel programme' fees. There has been praise associated with this scheme, but there have also been many problems, including what have been seen as perverse incentives for universities to 'cash in' on the parallel programmes at the expense of a good university education and university experience for students. In some instances, demand-driven courses were hastily put together and offered to students, some of which could have been offered at diploma level.

There are media reports that the Kenya government has recently decided to review the parallel programme and control the money it collects from direct fee payments; there is even the suggestion that the programme could be scrapped. The funding model that included the parallel scheme opened university places to other students, including mature students who wished to enrol to pay higher fees upfront (World Bank 2019; Oketch 2003). Quality has certainly been an issue of concern (Odhiambo 2011) associated with this 'pay-as-you-go-scheme' although university managers have been quick to defend their institutions against claims that in focusing on parallel programmes they have compromised on quality.

Finance Models and Widening Participation as an Unintended Public Good

Some benefits from higher education are direct and others are indirect, but they all have to be taken into account when discussing higher education as a public good and the financing models to pay for it. The indirect effects come about through intervening variables, such as that education contributes to the rule of law and political stability, which in turn feeds back to aid economic growth, generating externalities that benefit others and future generations. These externalities and feedback effects are not typically anticipated by the family and student who invest in education (Lucas 1988), and there are those sceptics who do not address this issue but there are also many non-sceptics who do (Breton 2008; McMahon and Oketch 2010: 42). The history of Kenya's higher education financing can be divided into two phases.

- 1. 1963–1983 (free and very low-key loan scheme financing): Kenya was served by one university, the University of Nairobi, which had been elevated to university status in 1970. Participation was restricted by poor academic performance in the lower levels of the education system, such that only a limited number of students attained the academic qualification required to be admitted to university. Exclusion from university education was high and expansion remained restricted. University education during this period was highly prestigious and university graduates found immediate employment in civil service and in state-run corporations. Although low in numbers, these graduates were instrumental in the Africanisation of government institutions during this period (Amutabi 2002). University education was free of charge until 1973 when a loan scheme was introduced, but access to university remained free at the point of use. The recovery of the loan was weak due to a weak infrastructure in which even those who worked in civil service where repayment could have been easier to administer did not have their loans deducted from their earnings.
- 2. 1984–present (loan scheme and pay-as-you-go financing): Kenya's government developed the confidence to expand university education. In 1984, Kenya established its second university, Moi University, which was brand-new, constructed from scratch. The next year (1985) Kenyatta University College, which had been a constituent college of the University of Nairobi to accommodate the Education Faculty, was elevated to university status and

renamed Kenyatta University. Two years later (1987), Egerton University was established by elevating an agriculture farm college that had been in existence since 1939. In a span of three years (between 1984 and 1987) Kenya had gone from having one public university to having four. By December 1994, Jomo Kenyatta University College of Agriculture and Technology, that had been a constituent College of Kenyatta University since 1988 was elevated to a full university and became Jomo Kenyatta University of Agriculture and Technology. Within a decade of creating its second public university, Kenya had five full universities with several constituent colleges. This was a massive leap, which also included a double intake of students into the university in 1986 and 1990. Some of the benefits to society from this rapid expansion of public higher education to accommodate demand are indirect, and may not have been anticipated by the students and the government of the day. For example, Kenya has a vibrant civil society that has become stronger over the years. It cannot be ignored that higher education expansion has contributed to strengthening civil society in the country. This in turn has aided the democratic space in Kenya. As Amutabi (2002, 164) argues, '... the university students have bequeathed to Kenyans and to the democratization process the power to riot, to protest, and to stand up for their rights'. At the same time, it is evident that Kenya's government defined some the benefits of higher education as private, and this is informed by the use of cost-sharing to expand university education.

3. In a later period, from 1998/1999, the government introduced direct upfront payment in the form of parallel programmes, to respond to demand but also to shift costs further to students, with the possibility that instead of complementing university budgets, the parallel programme resources were an essential part of the fiscal management of the public universities. In the end, this approach is claimed to have potentially undermined the quality of university education and student experience, even though it also expanded access.

In 2013, ten colleges were promoted to full university status. In 2019, it was reported that Kenya boasted about thirty-four public universities and university colleges (Owino 2019) although a report by the Commission for University Education (CUE) indicated that as of 2018, there were thirty-one public chartered universities and six public universities constituent colleges (CUE, 2019). The effects of the expansion will become even stronger some twenty years into the future, because higher education is a dynamic process whereby current benefits derived from participating in education are the result of the education of prior generations (McMahon and Oketch 2010). Future generations will derive benefits as a result of the education of the current generation. The projected expansion to 2030 in terms of student enrolment is shown in Table 4.

Subsector	2016	%	2030	%
Public universities	479,000	73.8	636,651	47.6
Private universities	85,000	13.1	234,262	17.5
OUK	0	0.0	267,728	20.0
Public TVET	27,000	4.2	100,000	7.5
Private TVET	58,000	8.9	100,000	7.5
Total	649,000	100	1,338,642	100

Table 4: Planned Evolution of the Kenyan Higher Education System by MainSegment (2016–2030)

Source: World Bank, 2019

It seems logical that the projected expansion of higher education in Kenya is important for Kenya's development and higher education as a public good, but it is also worth pointing out, as has been stated earlier in the paper, that all three benefits of higher education should define the financing model in expanding access – that is, the benefits to the individual, to the household and to the community. That said, it seems in Kenya's context that the transformation of the financing model may have aided higher education expansion and the associated externalities that arise from this expanded access – that therefore the concept of higher education as a public good and the transformation of the financing models processes have influenced each other. To paraphrase Marginson (2011), in Kenya's context, which combined the loan systems of 'study now, pay later' and the parallel programme of 'pay as you go', its state higher education system has become both 'public' and 'private'.

Conclusion

State universities in Kenya are comparatively young, but they accomplished their initial mission of producing adequate human resources for the civil service, national corporations and the private sector; graduated hundreds of thousands of students; and helped foster an intellectual community in the country (Oketch 2003). In just fifty years, public higher education expanded from a single university to about thirty-four public universities and constituent colleges by 2019. Rapid expansion has occurred under a period of cost-sharing. Amutabi (2002) has emphasised the public good purpose of the Kenyan universities in terms of developing and contributing to an Africanised civil service and democratic space in the country, a role that the Kenya government must have valued when the University of Nairobi was established. But soon after, the government introduced student

loans as a mechanism to expand access, indicating that the benefits of higher education were now defined as private economic enrichment and that students needed to contribute to its costs. Free public higher education as a public good attracts widespread agreement but Marginson (2011) has argued that the desired quantity raises normative issues. The extent to which higher education can be expanded freely given other educational objectives is debated in the literature. That said, it seems logical to conclude that in Kenya's context, the transformations of the financing model may have aided the expansion of higher education and served a public good purpose and as such that both processes have influenced each other.

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