

To cite this article: Samuel Wamalwa Munda (2024). DEMAND DRIVEN UNIVERSITY EDUCATION PROVISION: IMPLICATIONS FOR EQUITY AND QUALITY, International Journal of Education and Social Science Research (IJESSR) 7 (3): 65-81 Article No. 934, Sub Id 1453

DEMAND DRIVEN UNIVERSITY EDUCATION PROVISION: IMPLICATIONS FOR EQUITY AND QUALITY

Samuel Wamalwa Munda

School of Education and Social Sciences
Kaimosi Friends University
Kaimosi, Kenya

DOI: <https://doi.org/10.37500/IJESSR.2024.7305>

ABSTRACT

The established link between higher education attainment and individual socio-economic prosperity explains to a large extent the continued increase in private and social investment in education. It is the driver of growth in established higher education institutions and in the number of students enrolled. Many research reports on the status of education reveal the intensity in efforts to address issues underlying the poor quality of education. It is generally agreed that universities are entrusted with the task of generating knowledge of appropriate quality, and to making this knowledge availability to a wide population in order to support national economic competitiveness. But the issue of forces driving demand for higher education and their capacity to distort access to opportunities stand out. As nations endeavour to expand access to higher education, challenges of inadequate resource provision constrain access to opportunities for students with certain unique attributes. Overall national socio-economic development requires that education provision be inclusive to cover students with unique characteristics including the marginalised. Participation of those with attributes defined vulnerabilities should be a pre-requisite to quality assessments. This paper therefore examines university education demand trends in Kenya and how they related to students' characteristics. Descriptive survey designs were used. A sample of 524 respondents was drawn from among the twenty-two public and eighteen private chartered universities. Data was analysed using frequency tables and percentages, and means; hypotheses were tested using ANOVA, with all statistical tests done at $\alpha=0.05$ level of significance. Results showed that overall demand for education was on the increase in public universities, but declining in private universities. Disparities in demand by gender were observed with more males accessing university places. Consequences of increased demand for university education included high workloads for lecturers, and congested facilities. These findings are important to educators, education planners, institution managers who are charged with devising mechanisms and processes that address issues of quality and equity in demand for university education.

KEYWORDS: Demand, Equity, Quality

INTRODUCTION

Kenya's long-term development blue print (Vision 2030) recognizes that higher education should play a key role in the projected economic growth and development through improvements in knowledge and skills of those in productive sectors of the economy. Sessional paper No. 10 of 2012 (Republic of Kenya, 2012) which sought to operationalise vision 2030 identified improved transition from secondary to tertiary level as a means of creating a knowledge-based society that supports priority development areas of health, sanitation, environment and housing. Improved transition was expected to help address gender imbalances and other obstacles facing vulnerable groups by equipping them with skills that enable them live more productive lives. It was also way of ensuring these institutions contribute to national development endeavours.

Arthur & Sheffrin (2003) define "Demand" as an economic principle that describes a consumer's desire and willingness to pay a price for a specified good or service. As a concept, demand presupposes that consumers make rational decisions about the quantity and type of good or service they purchase by looking at costs and expected benefits derived from available information (Sarpkaya, 2010; Arthur & Sheffrin, 2003). Factors such as level of income, the price of the product, system of pleasure and quality of the product are powerful forces that drive demand for goods and services in the market (Beneito et. al, 2001; Kim, 1988). Demand for education therefore implies it can be enjoyed at a cost to consumers who may be individual beneficiaries, or the society subject to benefits that they derive from its provision. It follows then that students (and society) as consumers will purchase a specific education programme as long as they are satisfied that the benefits to be gained are worth the price.

Developments in higher education have been dramatic, extensive and generally affected diverse social groups within populations. Three basic stages of development through which higher education has gone (Traw, 2006) since the first half of the 20th Century are education for elites; mass education; and now, efforts towards universal access. However, a constant feature of demand trends has been the disparities that exist between geographical regions; Marita & Bassett (2022) argue that programs that expand access, the number and types of providers of education, access to information on returns to individuals and society from higher education are strong drivers of demand for higher education. But differences in levels of economic development, which influence policy on resourcing of education is also a critical factor. Research reports growing enrolment gap between developed and developing countries (UNDP, 2020). However, Sessional paper No. 10 of 2012 (ROK, 2012) indicated that the Kenya's education system had improved remarkably with literacy rates of over 80% among youth in the age range 15 – 24 years.

One key factor driving growth in demand for education (Marita & Bassett, 2022) is the strong demand for for employees with higher education especially in low and middle income countries, need to address diversity in education. There has been growing consciousness that some groups are disadvantaged in access to education; their concerns have been voiced in national and international

forums (Altbach et. al, 2009) thereby influencing change in attitudes and policies relating to access. The drive for inclusive education has roped in diverse groups that were not previously included or appropriately served by education system (Allotey et al, 2023). These groups have different needs and interests (Abagi et. al 2005), which higher education systems can only meet by broadening structures, programs and modes of delivery. Examining the extent to which select interest groups have been accessing higher education over the years is an important measure of demand for education among these groups.

Demographic forces are also a major factor driving demand for education up to 2030 and beyond. It is projected that women will substantially expand their participation in higher education and form the bulk of the student population in universities (OECD, 2008; Beneito, et. al, 2001). Besides, the student population will become more varied, with older students, part-time students and other types of scholars taking prominence (Vincent-Lancrin, 2008). This is in keeping with UNESCO's World Development report (UNESCO, 2006) which observed that rapid obsolescence in skills and the changing labour market dynamics had increased demand for "life-long learning" globally. It is projected that the education systems are going to draw in students outside the traditional 18-24 year old age bracket (UNESCO, 2006). For developing countries including Kenya, expanding universities will remain a biggest challenge to governments for years to come. Though the number of public and private universities almost doubled over the past ten years (ICEF Monitor, 2023), soaring student-teacher ratios have undermined quality of existing programs, and most institutions are in financial distress.

Policy propositions to enhance equity in the provision of education have been a central theme in national and international forums. However, a comparative study of 15 countries (Altbach et al, 2009) showed that despite efforts at greater inclusion, the privileged class still retained relative advantage in nearly all nations. This is because providing higher education to all sectors of a nation's population means confronting social inequalities that are deeply rooted in history, culture and the economic structure that influences individuals' ability to compete. Attempting to redress disparities in access to higher education along socio-economic status, and geographical location often brews a lot of controversy. Unequal distribution of wealth and resources all contribute to disadvantage certain population groups. In the US for instance, participation rates for minorities continue to lag behind; In India, the likelihood of students continuing to a fourth year degree is largely determined by socio-economic status of students' families regardless of race or ethnicity (Kapur & Crawley, 2008; Altbach et al, 2009; Lloyd, 2004). Other forces working against the poor include indirect costs such as living expenses, loss of income and the fear of debts. These factors are most crippling in sub-Saharan Africa (Altbach et al, 2009), but serious throughout developing countries and those undergoing economic transition.

From the foregoing, it is clear that diverse strategies exist to boost expansion of university education in both developed and developing countries. Some of the strategies are geared towards adopting

systems to survive new challenges or to exploit opportunities that present themselves. These strategies have a bearing on how private and societal education needs are determined and addressed. Kenyan universities have been particularly challenged to react to some of these developments (Abagi et al, 2005) and to improve their own efficiencies; the alternative is to face obsolescence. The fact that Kenyan universities seem unable to cope with rising demand for higher education is an issue under intense debate with little empirical evidence for protagonists to back their arguments. By examining trends in demand for university education, this study provides a basis for policy intervention.

METHODOLOGY

The study employed survey research designs by which information was gathered for the purpose of measuring sample characteristics, and establishing relationships between demand and the identified variables. The target population consisted 22 public and 14 private chartered universities which constituted the sampling frame from which institutions to be studied were drawn. The accessible population consisted students and lecturers from two universities each selected by random sampling from among the public and private universities. Deans of faculties and two Chairpersons of departments which had the highest student enrolments respectively were purposefully picked to provide information on institutional policy and practices with regard to demand for university education. Instruments, consisting of questionnaires were pretested to determine the validity and reliability before they were used to collect data

FINDINGS AND DISCUSSIONS

The key attributes considered in the study covered gender, mode of education financing, and type of admission (fresh secondary school leavers or in-service schooling arrangement). Data on student enrolment which reflects demand for education was collected from students, lectures and university administrators. An analysis of results reflected the mixed messages in the information about the costs and benefits which students can expect.

Table 1.1: Lecturers' Views on Trends in Demand for Programs in Universities

State of Demand	Public Universities (n=46)		Private Universities (n=42)		Combined Demand Trend	
	f	%	f	%	f	%
Decreasing	2	4.3	16	38.1	18	20.5
Stable	9	19.6	10	23.8	19	21.6
Increasing	35	76.1	16	38.1	51	58.0
Total	46	100	42	100	88	100

Source: Field data

From table 1.1 a greater proportion (76.1%) of respondents in public universities indicated increasing enrolments compared to a smaller proportion (38.1%) of those in private universities. A much smaller proportion (4.3%) of respondents in public universities indicated declining enrolment compared to 38.1% of those in private universities. Overall, 58.0% of the respondents indicated that enrolments were on the increase.

The finding that enrolment was on the rise was in keeping with documented government position (Republic of Kenya, 2008b; 2009; 2012a; Gogo, Ayodo & Othuon, 2010; Icef Monitor, 2023; UNDP, 2020). The growth rates in public universities were indicative of massification: the term used to describe availability of education that results in overwhelming number of students entering university, and the proliferation of higher education institutions to cater for the students maintained over a period of several years (Mohamedbhai, 2008; Calderon, 2012; Macgregor, 2014).

The challenge associated with massification revolves around ensuring that education provided meets requisite quality standards and its contents are relevant to the country's socio-economic needs. Often, rapid increase in enrolment is rarely matched with resources and requisite personnel, resulting in facilities that are crowded and with high student teacher ratios (Icer Monitor, 2023; UNDP, 2020). This supports the government survey report (Republic of Kenya, 2007b; 2008b; 2012c) which observed that high levels of enrolment growth were likely to stifle a diversified university system and the goal of creating discipline specific centres of excellence.

Private universities did not comparatively grow their enrolments (table 4.3). This was contrary to the expectations of widely established research findings demonstrating that private higher education provision was the fastest growing segment of education (World Bank, 2010; Altbach 2012; Jegeda, 2012). The finding, however, lend credence to views of a government taskforce (Republic of Kenya, 2012c) which observed that current government financing of higher education lacked specific policy provisions for supporting students to access education opportunities in private universities. The declining enrolment could be indicative of the bad influence this policy had on private universities growth plans. However, recent policy initiatives in Kenya's higher education sector would seem to be remedying this problem. Presently, the government has allowed admission of state funded students in private universities. This may redress the challenges of declining demand for education in private universities, and open up opportunities for education in private universities for students from low socio-economic and marginalised backgrounds.

Demand for University Education by Gender

Disparity in access to education by gender has been one of the key issues highlighted in Kenya's higher education sector, with reports indicating that the proportion of female students enrolled in universities accounted for less than 40% of all enrolments (SID, 2010; Odebero, 2007; 2011). The study therefore sought to determine the extent to which this concern was being addressed in higher education provision. Since students were randomly sampled, their response rates reflected the heterogeneity that

existed in the population (Mugenda & Mugenda, 1999; Gay, 1987). Data obtained from students through questionnaires was analysed to estimate the relative share of enrolment by gender in universities as summarised in table 1.2.

Table 1.2: Demand for Education by Gender in Public and Private Universities

	Public		Private		Total	
Gender	f	%	f	%	f	%
Male	107	64.1	75	50	182	57.4
Female	60	35.9	75	50	135	42.6
Total	167	100	150	100	317	100

Source: Field data

From the results, male students were over represented in university education, with females constituting 42.6% of the overall enrolment. However, this was an improvement on earlier findings which had found the proportion of females in universities to be 35% (CHE, 2010; Ministry of Education, 2012; SID, 2010; Odebero, 2007; 2011). Despite this notable improvement, significant differences still existed in public universities where more males (64.1%) compared to females (35.9%) were enrolled. But private universities seemed to have attained parity at 50% for either gender.

Government policy on financing higher education has for long favoured public against private universities (Republic of Kenya 2012c), making public universities institutions of choice among many higher education seekers. It was possible that financially empowered families could opt out of the subsidized but more competitive admission criteria in public universities in favour of private universities. This could explain the higher concentration of females in private universities. However, since government has already set out to allow state funded students into private universities (Nganga, 2014) this was likely to change.

Demand for University Education by Type of Admission

Type of admission denotes the various paths that students take to access opportunities for university education. Though most students qualify and join universities directly from secondary school, there are those who do not immediately join due to inability raise requisite grades, and have to go through some training before they merit admission into university programs; others who qualify but fail to raise tuition charges, thereby taking alternative training before ending up in universities as privately sponsored in-service students. All these constitute alternative entry admissions.

Determination of the proportion of students accessing university education through the different paths was useful in gauging institutional policy regarding diverse service needs to students. As earlier indicated, students were randomly sampled; their response rates reflected the heterogeneity that existed in the population (Mugenda & Mugenda, 1999; Gay, 1987). This was used as a basis for estimating the level of demand by students seeking admission by alternative entry as outlined in table 1.3.

Table 1.3: Access to Education by Type of Student Admission

Admission Type	Public Universities (n=167)		Private Universities (n=150)		Total (n=317)	
	f	%	f	%	f	%
Direct Entry	132	79.0	126	84.0	258	81.4
Alternative Entry	35	21.0	24	16.0	59	18.6
Total	167	100	150	100	317	100

Source: Field data

It was found that the proportion of students getting admission through alternative paths was much smaller (18.6%) relative to those gaining direct admissions into university from secondary school (81.4%). This was a substantial increase given universities exclusively admitted school leavers before higher education was liberalized. Public universities recorded a higher proportion (21.0%) of those admitted by alternative entry compared to private universities (18.6%). On the positive, this development provides opportunity for a broader cross-section of society to access university education. Indeed there is a massive international initiative to provide alternative education access to millions via internet and other technology powered media (US Department of Education, 2004; National Centre for Education Information 2005; Franco, Nigmonova & Panichpathom, 2014).

The fact that Kenyan universities barely admitted 20% of qualified secondary school graduates (Mulongo, 2013) was indicative of excess demand which universities were unable to cope with. To be effective in responding to this demand, universities may need to expand capacity to carry more qualified school leavers through use of both traditional and alternative paths of access to university education. This could mitigate intertwined chain of dynamics that produce different forms of inequalities through relational pathways that put some groups in positions of social and economic powerlessness and abjection

Demand for University Education and Financing Modality

Table 1.4: Demand for University Education by Financing Modality

Funding	Public (n=167)		Private (n=150)		Total (n=317)	
	f	%	f	%	f	%
GSSP	106	63.5	1	0.7	107	33.8
PSSP	61	36.5	149	99.3	210	66.2
Total	167	52.7	150	47.3	317	100.0

Source: Field data

From table 1.4, it emerged that a bigger proportion (66.2%) of university students accessed education through private sponsorship arrangements. As was expected, private universities had a comparatively higher proportion (99.3%) of privately sponsored students compared to 36.5% in public universities. Therefore, government efforts to reduce reliance on the exchequer to finance higher education seemed to be paying off. GSSP admissions were initially designed to regulate demand for the certain programs of study through restriction of admissions and provision of government subsidies in the form of bursaries, loans and grants to support students in specific disciplines (World Bank, 2010; Jegede, 2012). Grants and loans served public interest in programmes critical to national development, and was a strategy to raise demand among the poor who in the absence of the subsidy would not access university education. Clearly, the findings indicate that government subsidies were one among many drivers of enrolment into university programs.

Despite these positive developments, the Taskforce on the re-alignment of the education sector to the constitution of Kenya 2010 (Republic of Kenya, 2012c) expressed concern that privately sponsored programs in public universities were inefficient and financially burdensome to poor parents. Inability of poor households to meet the high fees charged raises equity issues and the place of effective demand or access to university education. World Bank (2010) observed that grants and scholarships allocation in Kenya had a criterion linked to academic performance rather than socio-economic disadvantage or priority disciplines for the country's development. Beneficiaries of government grants often came from the privileged social groups. Measures to reduce state budget (Edwards & Means, 2019) can feed into the dynamic of segregation and marginalization of students according to socioeconomic status. Despite the key role played by private universities in increasing supply of higher education, Kenya lacked specific policy provisions for supporting these institutions as happens in other countries like Korea and Australia (Republic of Kenya, 2012c). These factors may explain the observed absence of government sponsored students, and hence the declining enrolment growths in private universities in Kenya.

Examination enrolment trends, established that demand for university education was on the rise in public universities while private universities experienced declining enrolment. The decline in enrolment in private universities could threaten government efforts to expand access to university education. Also notable was demand for university education having disparities in favour of males (57.4%) relative to females (47.6%). Public universities exhibited bigger disparities with males dominating at 64.1%. Private universities had however attained gender. There was need to maintain efforts aimed at attaining gender parity in public universities.

Direct entry from school was the dominant mode of admission to universities in Kenya. However, alternative entry had substantially risen to stand at 18.6%. The combined use of both strategies was the most appropriate for addressing demand for university education. Over 66% of students funded their education from private sources. Since private funding of education helps ease financial pressure on government, it should devise complementary strategies to ensure more students access private finances on a sustainable basis.

Institutional Response to Demand for University Education

The second objective of this study was to determine how universities responded to social demand for higher education. Strategies to address demand for education are an indicator of an institutions' level of preparedness to deal with challenges that come with that demand. The strategies are an important determinant of whether or not an organization will be effective in meeting its goals. Elements of strategy examined in included establishment of new campuses, admitting more students in existing programs, diversification of curriculum and instructional strategies.

Students who are consumers of education services together with lecturers, heads of departments and deans of faculties whose role is to design platforms for and deliver education services were thought to be the most appropriate component to provide information on demand coping strategies within the universities. Their opinions were sought on five items of strategy employed to address demand for education in the departments where they taught. Their responses were measured on a likert scale and analysed using cross-tabulations. Chi-square tests were used to determine the existence of differences in the application of these strategies between public and private universities. Findings were summarised into frequencies and percentages for each of the strategies and presented in table 1.5.

Table 1.5: Lecturers' Perception of Strategies used to Address Demand for University Education

Strategy	Response	Public Universities (n=46)		Private Universities (n=42)		Total (n=88)		Mean	χ^2	df	p
		f	%	f	%	f	%				
Establishing new campuses	Agree	43	93.5	38	90.5	81	92.0	1.15	1.797	2	0.407
	Don't Know	1	2.2	0	0	1	1.1				
	Disagree	2	4.3	4	9.5	6	6.8				
Admitting more students in existing programs	Agree	40	87.0	31	73.8	71	80.7	1.34	2.657	2	0.265
	Don't Know	1	2.2	3	7.1	4	4.5				
	Disagree	5	10.9	8	19.0	13	14.8				
Diversification of instructional strategy	Agree	30	65.2	25	59.5	55	62.5	1.61	4.472	2	0.107
	Don't Know	3	6.5	9	21.4	12	13.6				
	Disagree	13	28.3	8	19.0	21	23.9				
Diversifying curriculum on offer	Agree	40	87.0	33	78.6	73	83.0	1.31	2.161	2	0.340
	Don't Know	2	4.3	1	2.4	3	3.4				
	Disagree	4	8.7	8	19.0	12	13.6				
Setting student pass rates for departments	Agree	23	50.0	22	52.4	45	51.1	1.80	0.128	2	0.938
	Don't Know	9	19.6	7	16.7	16	18.2				
	Disagree	114	30.4	13	31.0	27	30.7				

The five strategies examined were perceived to be effective in addressing demand for university education. From respondents' ratings of the strategies (table 4.7), the most effective strategy was establishment of new campuses (92.0%). This was followed by diversification of curriculum on offer (83%); admitting more students into existing programs (80.7%); and diversification of instructional strategy (62.5%). For all the strategies examined, there was no significant difference in the perception of their effectiveness in both public and private universities ($p > 0.05$).

Establishing new campuses as a strategy for addressing demand for university education could be relied on to raise access by increasing the capacity of universities to take in more students; it is capable of broadening the reach of universities to other geographical locations thereby mitigating the negative effects of marginalization associated with distance to education centers. Indeed the basic report on spatial analysis of school mapping data (Ministry of Education, 2011) demonstrated the close relationship that exists between concentration of higher education institutions and enrolment rates at all levels: central Kenya and Nairobi which had the highest concentration of higher education institutions also had relatively higher enrolment rates at tertiary level. This appears to have raised the specter of heightened demand for university education in comparison with other regions that did not have institutions of higher learning. This association between institutions of higher learning and heightened demand for university education is a good rationale for creating new campuses as a mutually beneficial undertaking for society.

The challenge that stands in the way of this strategy relates to earlier research finding which revealed that universities (especially public) lack regulatory pressure that is critical in ensuring conformance to set standards (Chub and Moe, 1998). The sheer number of institutions coming into being (Maviiri, 2011) has surpassed the capacity of CUE to oversight their activities. It emerged from interviews with Deans and Chairmen of departments that efforts to address demand for education by expanding university places had overloaded lecturers in three critical dimensions: they had to move between campuses that were sometimes geographically far apart to teach. This consumed valuable time in logistics and exhausted them in the process. The intensive engagement in teaching also undermined their attention to non-teaching academic activities including research. To sustain education quality, expansion ought to proceed in tandem with resource provision.

Diversification of curriculum is a measure that is taken by education systems to ensure its programs keep pace with changing need for diverse skills that are valued by society in the labour market (Benavot, 2006). Research evidence in support of instruction in broad skills suitable to play a part in the general division of labour has received a lot of international attention (Benavot, 2006; CHEPS, 2011a), with some countries systematically monitoring the connection between higher education and the labour market. For this study, supplementary data sought from students (through focused group discussions), and lecturers Deans and Chairmen of Departments (interviews), revealed that diversification of the curriculum was a valued strategy for addressing demand for university education.

Admission of students into existing programs as a strategy for meeting the requirement to raise student numbers would be a strategy of choice among institutions of higher learning. Benefits associated with this strategy include possible increased utilization of available human resources, facilities, equipment and other non-academic support services offered to staff and students at already existing installations. However, challenges which were a direct effect of this strategy were highlighted during interviews with lecturers, deans and during focused group discussions with students: some programs were over established with lecturers having to attend to large classes; instances were reported, where students attended lessons from outside classrooms whenever their carrying capacity was exceeded. Though this would appear to have been intended to mitigate shortage of teaching staff and the challenge of inadequate facilities, it was probably one aspect that most undermined the quality of teaching.

Diversifying content delivery strategies was one way of promoting flexibility in attendance to education programs offered in the universities. Efforts to diversify instructional strategy were notable across universities. All Deans of faculty who were interviewed in sampled institutions observed that there were evening, weekend and regular face-to-face classroom attendance and interaction as well as on-line platforms set up to broaden their reach and meet student needs and expectations. However, it emerged that internal institutional setbacks undermined their effectiveness. There was reported poor integration of modern pedagogical strategies in curriculum implementation especially in public universities. A dean of faculty observed as follows:

“It is true that lecturers are not well facilitated to fully deploy modern instructional methods ... teaching aids and equipment available cannot support ICT intensive pedagogy. Classes are also large and do not allow acceptable use of ICT powered teaching aids for the benefit of students in common courses... and the academic infrastructure was not deliberately tailored to support effective use of technology as intended by curriculum designers. There isn't much they can do beyond what they are currently doing”.

In a focused group discussion with select students, it emerged that there was no active engagement of students in on-line instruction at universities. Instead, students acknowledged occasional exposure to ICT enriched instruction which required total student presence in classrooms. A group of students in one university observed thus:

“ICT supported learning takes place in courses with few students... they are always here to attend lessons from their classrooms ... and we don't know of any who receive instruction while far off from this university ... they are not there.”

Similar findings have been reported (NCST, 2010; Kiptalam & Rodrigues, 2010) among universities in developing countries. They show no evidence that they are actively responding to mass student expectations, an ingredient critical in directing the response of institutions to societal needs. These issues could undermine efforts by Kenyan universities to package themselves as choice destinations of higher learning in the region if measures to redress them are not put in place. This assertion is made

on the basis that liberalization of the higher education sector (OECD, 2002; Yusuf, 2007) shifted responsiveness to national needs from central planning units to demand for skills as mediated by labour market needs through student preferences and choices. Kenyan universities must therefore rise to the emergent challenge of consumerist thinking among students seeking university education. It was also reported (Kiptalam & Rodrigues, 2010) that Kenya's university education had not reached the level of sophistication that met stakeholder expectations in the use of ICT supported teaching. This left a large group of students from vulnerable groups of society increasingly unprepared and unlikely to enjoy the benefits of the information revolution (NCST, 2010). For purposes of serving public interest, and to maintain their competitiveness, universities have to embrace diversified instructional strategies as a coping mechanism.

From the findings above, it emerged that there were no significant differences in the way public and private universities responded to demand for higher education. This was contrary to the perception that private universities are more enterprising and flexible in their drive to conquer the market. They did not have unique approaches for diversifying instructional strategies to tap into the education market. Government should therefore facilitate universities to invest in ICT and complement observed efforts to spread out by opening up new campuses. Another key finding was that class size had an inversely relationship with education quality. Continued admission of more students into existing programs therefore undermined institutional effectiveness. This was a threat to quality that both government and universities must painstakingly guard against.

CONCLUSION

Responses from students indicated that male students were over represented in university education, constituting 57.4% of the enrollments relative to 42.6% females. The disparity in demand of education by gender stood at 64:36 and 50:50 for males to females in public and private universities respectively. Private universities were thus more equitable in their educational provision than public universities. Given that government subsidy in financing of university education was and continues to be concentrated in public universities, more males than females could be accessing this subsidy due to the skewed demand in public universities.

Type of entry denoted the modality in terms of the various paths students used to access university education. There were more students admitted directly from school compared to those who used other alternative paths of entry to university. Therefore, opportunities existed for those who had qualified but could never have accessed university education after secondary school to attend using alternative access paths.

The different forms of sponsorship were also an aspect examined in the study. It emerged that more students accessed university education through private sponsorship arrangements. As expected, a bigger proportion came from private universities where students financed their studies under this arrangement. The proportion of those who were on government sponsorship in public universities had

drastically reduced, a show that government efforts to reduce reliance on the exchequer to finance higher education were paying off.

Institutional Response to Demand for University Education

Results of the analysis indicated that whereas demand for university education had been on the rise in public universities, private universities had declining student admissions. The decline could be attributable to strict fees payment requirements in private universities since they survived to a large extent on the levies collected from students; a perception also existed among fresh secondary school graduates (and their parents) that private universities were expensive. The state of affairs may also be attributed to government policy which had no provisions to support private universities despite the key role they played in bolstering supply of higher education opportunities.

Strategies for Addressing Demand for University Education

From findings and discussions, it emerged that there were no differences in the way public and private universities responded to demand for higher education. There was need to invest more in ICT to complement observed efforts to spread out by opening up new campuses. However, large class sizes were found to undermine education quality. Continued admission of more students into existing programs therefore undermined institutional effectiveness since it made it difficult to conduct individualized instruction for students.

There was however a number of curriculum areas in universities where growth in student enrolment was not supported. Measures employed to curtailed growth included setting high qualification requirements for students to gain admission into the programs. The major concern driving these restrictions was inadequate facilities and equipment required to run the programs. Often such equipment was expensive both to procure and maintain. Fees charged against students' admission was also used as a tool to regulate demand.

CONCLUSION

The following conclusions were made based on findings of this study:

Demand for university education was on the rise in public universities but declining in private universities. Government should therefore formulate policy to support private universities to enhance their higher education supply capacities. More male students than females accessed education in public universities compared to private universities where gender parity had been attained. School leavers still dominated university admissions although access through alternative paths of entry had significantly risen. The proportion of students under private sponsorship for university education had surpassed those under government sponsorship, effectively easing off significant pressure on government to commit the exchequer to finance higher education.

Dominant strategies used to increase demand for university education were establishment of new campuses; admitting more students into existing programs; use of diversified instructional strategies and diversification of curriculum. Though putting students in cross cutting courses under one instructor

was a key strategy in mitigating shortage of lecturers and space for instruction, it negatively impacted quality. The mean student lecturer ratio was found to be way beyond the highest recommended threshold of 1:18 and worse in public universities. Trimesters, which entailed splitting up an academic year into three teaching sessions, raised the capacities of universities to admit many students but strained both students and lecturers.

RECOMMENDATIONS

Based on findings and conclusions discussed, the following recommendations are proposed:

Enrolment growth in private universities was found to be on the decline, possibly due to lack of government sponsorship to students who may be keen to enrol in these universities. Access to government funding for university education should therefore be liberalized so that both public and private universities compete for students on equal footing. Government's decision to establish the Kenya Universities and Colleges Central Placement Services (KUCCPS) to coordinate admission of government sponsored students across universities and colleges was a step in the right direction. Public sponsorship of students in private universities should be deepened to allow those from poor backgrounds overcome the cost barrier which has for long impeded their access to education in private universities; this could significantly reduce congestion public universities.

Universities should be allowed to pursue regulated physical expansion and growth in enrollments in programs where real concerns exist about adequacy of equipment and facilities required to run programs. Government may only play the role of a regulator, ensuring that relevant guidelines relating to expansion of institutions are adhered to. It should actively support public interest by facilitating acquisition and maintenance of specialized equipment which are expensive both to procure and maintain for the benefit of programs which may not take off if universities were left on their own.

REFERENCES

- Abagi, O., Nzomo, J., & Otieno, W. (2005). Private Higher Education in Kenya. Paris: UNESCO-IIEP
- Altbach, P. (2012). African Higher Education Challenges: Economics and Research. Available at <http://www.insidehighered.com/blogs/world-view/african-higher-education-challenges-economics-and-research>. Retrieved 14/9/14.
- Altbach, P. G., Reizberg, L. & Rumbley L. E (2009). Trends in Global Higher Education: Tracking an Academic Revolution. A Report Prepared for the UNESCO 2009 World Conference on Higher Education. Available at www.uis.unesco.org/Library/Documents/tre-global-higher-education-2009-worldconference-en.pdf. Retrieved 17/2/12
- Arthur, S. & Sheffrin, S. M. (2003). Economics: Principles in Action. Upper Saddle River: Pearson Prentice Hall.



Beneito, P., Ferri, J., Molto, J. & Urriel, E. (2001). Determinants for Demand for Education in Spain. *Journal of Applied Economic*. No. 33, pp 1541-1551.

Calderon (2014). Massification Continues to Transform Higher Education. *University World News*, Issue No. 237, September 2012. Available at www.universityworldnews.com/article.php?story=20120831155341147. Retrieved 17/7/14

CHE (2010). 'University Enrolments in Kenya', in *Economic Survey* pp. 51-52. Nairobi: Government Printers

Chubb, J. E. & Moe, T. M. (1998). *Politics Markets and America's Schools*. Washington, D. C.: Brookings Institution.

Edwards, J. & Means, A (2019) Globalization, Privatization Marginalization: Mapping and Assessing Connections and Consequences in/Through Education. *Education Policy Archives* 27 9123). <https://doi.org/10.14507/epaa.27.5091>

Franco, C., Nigmonova, D., & Panichpathom, W. (2014) DeMOOCratizing Higher Education? Massive Online Courses for Developing Countries. Available at <http://norrag.worldpress.com/2014/07/08/> Retrieved 14/9/2014

Gay, L. R. (1987). *Education Research: Competencies for Analysis and Application*. Columbus, Ohio: Charles E. Merrill Publishing Company.

Gogo J. G. O., Ayodo, T. M. O., & Othuon, L. A. (2010). The impact of cost Sharing Strategy on Access, Equity and Quality of Secondary Education in Kenya. In *Journal of Planning, Economics and Management*. Vol. 2 pp. 1-16.

Jegede, O. (2012). Weaving Success: Voices of Change in African Higher Education – A Project for the Partnership for Higher Education in Africa (PHEA) Held at the Institute of International Education, 809 United States Plaza, New York 10017, on Wednesday , February 1, 2012.

Kapur, D. & Crawley, M. (2008). Beyond the ABCs: Higher Education and Developing Countries. Working Paper No. 139: Centre for Global Development.

Kim, H. Y. (1988). The Consumer Demand for Education. *Journal of Human Resources*. No. 23 Vol. 2 pp 173-192.

Kiptalam, G.K & Rodrigues, A. J. (2010). *Accessibility and Utilization of ICT Among Secondary School Teachers in Kenya*. Available at <http://www.cit.mak.ac.ug> Retrieved 20/7/2013.

Lloyd, M. (2004). "In Brazil, a Different Approach to Affirmative Action." *The Chronicle of Higher Education* No.51 pg10.



MacGregor, K. (2014). The Massification of Higher Education in South Africa. University World News, Issue No. 235, June 2014. Available at www.universityworldnews.com/article.php?story=2014083621 Retrieved 18/3/2014

Mamta, M. & Bassatt, R. M (2022) Higher Education: Understanding Demand and Refining Values. Available at <https://blogs.worldbank.org/en/team/r/roberta-malee-bassett>. Retrieved 11/5/2024

Maviiri, J. C. (2011). *Trading or Sharing – Emerging Opportunities and Challenges for Cross Border Higher Education in East Africa*. Surfing the Web: <http://www.iau-aiu.net>. Retrieved 16/6/2013.

MOEST (2000). Education Statistical Booklet 1990-1998. Nairobi: Fawe

Mohamedbhai G. (2008). *The Effect of Massification on Higher Education in Africa*. Available at http://www2.aau.org/wghe/scm/meetings/mai08/adea/study_massificatio.pdf Retrieved 15/10/12.

Mugenda, O. M & Mugenda G. A. (1999). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi: African Center for Population Studies.

Mulongo, G. (2013). Inequality in Accessing Higher Education in Kenya: Implications for Economic Development and Well-being. *International Journal of Humanities and Social Sciences*, Vol. 3 No. 16 pp49-61.

National Centre for Education Information (2005). Alternative Routes to Teacher Certification: An Overview. Available at <http://ncei.com/Alt-Teacher-Cert.html>. Retrieved 9/9/2014.

NCST (2010). *ICT Capacities and Capabilities in Secondary Schools in Kenya 2009/2010*. Nairobi: NCST.

NCST (2010). *ICT Capacities and Capabilities in Secondary Schools in Kenya 2009/2010*. Nairobi: NCST.

Nganga, G. (2013, January 26). *Far-reaching Reform as New Universities Law is Enacted*. Issue No 256. Retrieved from <http://www.universityworldnews.com/article.php?story=20130122145646505>. Retrieved 19/7/2013

Odebero, S. (2011). *Innovation in Higher Education Financing in Developing Countries*. Saarbrücken: Lambert Academic Publishing.

OECD (2008). *Higher Education to 2030. Demography. 1*. Paris: OECD

Republic of Kenya (2007). *Vision 2030*. Nairobi: Ministry of Planning and National Development.

Republic of Kenya (2008). *First Medium-Term Plan (2008-2012)*. Nairobi: Ministry of Planning and National Development.

Republic of Kenya (2009). *Education Facts and Figures*. Nairobi: Ministry of Education.

Republic of Kenya (2012). *Towards a Globally Competitive Quality Education for Sustainable Development: A Report of the Taskforce on the Re-alignment of the Education Sector to the Constitution of Kenya 2010*. Nairobi: Ministry of Education.

Sarpkaya (2010). Factors Affecting Individual Education Demand at the Entrance to University: Adnan Menderes University Sample. In *Educational Sciences: Theory and Practice*. No. 10 Vol.1 pp 475-488.

SID (2010). *Kenya's Vision 2030: An Audit from an Income and Gender Inequality Perspective*. Nairobi: Society for International Development

Trow, M. (2006). Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education in Modern Societies since World War II. J.J.F. Forest and P.G. Altbach (eds.), *International Handbook of Higher Education*, pp. 243-280. Dordrecht: Springer.

UNDP (2020) Human Development Report. Available at www.hdr.undp.org/indicators/69709 Retrieved 10/5/2024.

UNESCO (2006). *Global Education Digest 2006*. Montreal: UNESCO Publishing

US Department of Education (2004). Alternative Routes to Teacher Certification. Available at <http://www.ed.gov/admins/tchrqual/recruit/altroutes/index.html>. Retrieved 14/9/2014.

Vincent-Lancrin, S. (2008). What is the Impact of Demography on Higher Education? A forward-Looking Approach for OECD Countries. In *Higher Education to 2030 – Volume 1: Demography*, pp 41-103.

World Bank (2010). *Financing Higher Education in Africa: Direction in Development*. Washington, DC: World Bank.

Yusuf, S. (2007). *University Industry Linkages Policy Dimensions*. In Yusuf, S. & Nabeshima, K. (eds). *How Universities Promote Economic Growth*. Washington, DC: The World Bank.