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Full Length Research Paper

Financing of higher education in Africa: A case of Ethiopia public universities revenue diversification strategies

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Abstract
With the tremendous increase in university students enrolments experienced in Ethiopian public universities since years 2005, financing of university education has become topical issue among education stakeholders. This paper explores revenue diversification strategies being instituted by Ethiopia public universities to bridge the financing gap occasioned by the limited public funding and resource utilization by the universities. The study which is exploratory in nature sampled eight public universities that have been in existence for more than three years. Among the strategies employed to varying degrees included private sponsored students programs such as the extension, summer, distance programs and short term trainings. In addition, service units such as student and staff lounges and university farms were commercialized. It is however only the private student programs that were found to significantly contribute to internally generated revenues. The paper underscored the ingredients for successful implementation of the revenue diversification strategies, which included supportive legal and regulatory structures, decentralized and participatory management. The limitations inherent in implementation of revenue diversification strategies included allocation of more time to teaching at the expense of research and a skewed potential for revenue diversification across faculties.

Keywords: Financing, Revenue, Diversification
JEL Classification: I22

1.0 Introduction

Ethiopia has 21 public universities, with over 90% having being established in the last 7 years. The country experienced abrupt demand for higher education in the years 2005/2006. The demand called for expansion and re-aligning of higher education system in more direct support of national strategy for economic growth and poverty reduction (Yizengaw, 2003). An aggressive university expansion policy designed to raise the country's tertiary enrolment ratio to more significant levels produced some significant results. Total tertiary enrolments in universities and non-university tertiary institutions, both public and private, rose from 42,132 in 1997/98 to 192,165 in 2002/05 The annual enrolment growth rate of 50.86 per cent and tertiary-level gross enrolment ratio of 1.5 per cent in 2005 was a great leap from the gross enrolment of 0.8 in 2003, which placed the country among the lowest ranking countries of the world in education growth (Ministry of Education, 2005:12).

Private provision of tertiary education has been permitted by the government as a key component of the expansion strategy, and private tertiary institutions host 24.8 per cent of all tertiary students (Ministry of Education, 2005:13). In addition, the government introduced student cost-sharing in September 2003 through a deferred payment taxation mechanism for all future graduates (Government of Ethiopia, 2003). In line with the expansion strategy, the government launched Education Sector Development Programmes (ESDP) (a five-year development plan) programmed for academic years 2005/6 to 2010/11.

The programme envisioned to increase regular undergraduate enrolments from 35,000 to 80,000 and to quadruple graduate enrolments (from 1,350 to 6,000) during the three-year period. Though considerable ground has been covered with regard to undergraduate enrolments, graduate enrolment has however recorded modest growth. Public investment in education has risen as a share of GDP from 3.2 per cent to 4.5 per cent. This level of financial effort was higher than the 3.9 per cent registered for sub-Saharan Africa as a whole Education expenditure has also increased as a proportion of the overall government budget from 9.5 per cent to 16.8 per cent. Such increases still fall short of reaching the general range of 20 per cent to 25 per cent for most developing countries, suggesting

that scope remains for further increases in the government's education financing effort over the coming years (Saint, 2005:7).

In Ethiopia, the Government finances virtually all public tertiary systems that include the provision of free non-academic services to regular students. Full-time students (39 per cent of all students) pay no significant tuition fees, although part-time and private students (61 per cent of all students) do pay relatively higher fees. Part-time students are charged tuition of Birr 30 to 50 per credit hour, or Birr 90-150 (US$10–17) for the normal three credit course load taken each semester. Some institutions charge evening students additional fees of Birr 26 to 58 per credit hour for laboratory courses (Ibid). Annual recurrent expenditures per university student stand approximately at Birr 7,457 (US$860) when government-provided food, lodging and health care are included and Birr 5,500 (US$636) when student welfare subsidies are excluded. The latter level of educational investment is low in comparison to sub-Saharan Africa (US$1,500) and to neighboring nations like Kenya (US$1,800), Tanzania (US$3,236) and Uganda (US$800). Experience indicates that it is extremely difficult to provide higher education at an acceptable standard for less than an annual per-student expenditure of US$1,000 (Association of African Universities 1997).

Student welfare subsidies and fee-free higher education are increasingly at odds with prevailing practice in other African countries, especially in the Anglophone sphere, where various forms of student cost-sharing are emerging (Johnstone, 2003). Consequently, the government introduced a university graduate tax in September 2003 designed to re-coup gradually the cost of meals and lodging, together with a small portion of tuition costs. Cost-sharing based on the 'graduate tax' will not immediately relieve the financial pressures on the system produced by rapid enrolment expansion, further any university education system would be hard pressed to substantially expand enrolments while maintaining high levels of educational quality. University income-generation activities would therefore supplement the public funds received from government. It is in the backdrop of this situation that this paper sought to explore the extent to which Ethiopian public universities have instituted revenue diversification strategies.

2.0 Methods and Materials

2.1 *Methods*

The study employed a descriptive research design. The survey explores and describes observed phenomena (Kathuri and Pals, 1993). The population of the study consisted of all 21 Ethiopian public universities. Of the 21 public universities in Ethiopia, 13 universities were less than last 2 years old. Owing to their low levels of development it was deemed that will not provide sufficient data required to meet the study's objectives. The study therefore selected all the 8 older public universities that had been in existence as fully fledged universities for more than two years.

2.2 *Materials*

The study employed a combination of interviews and questionnaires in collecting data. A detailed questionnaire and interview schedule was developed to guide the data collection. The instruments were standardized for validity using Cronbach's Alpha procedure. Pretesting of the instruments was done at Debre Markos University, one of the new universities that were not included in the sample. This formed the basis of exclusion of universities that were less than 2 years old. Visits were made to each of the eight sampled universities guided questionnaires were filled, interviews conducted, and general observations made. Comparative data from regional universities was also obtained through secondary data mining.

3.0 Result and Discussions

3.1 *Revenue Diversification strategies employed*

Like other universities in Eastern Africa, Ethiopian Universities have tried number of revenue diversification strategies with varying degree of success. Figure 1 shows amount of revenues generated by different strategies in different universities in Ethiopia.

Though it was possible to ascertain the actual revenue generated by most universities, Addis Ababa and Gondar Universities declined to reveal the amounts of internally generated revenue. It was however possible to estimate revenue generated by the extension and summer programs. This was done by multiplying the number of students in the respective programs by the normal credit hour load per academic year and the cost per credit hour.

3.1.1 Extension Students Program

The extension students program was offered to self or company sponsored students outside the regular working hours, that is 5 pm to 8 am on Monday to Friday and on weekends. The program targets workers who wish to upgrade their qualifications and high school graduates who met the minimum university entrance requirements but could not meet the target set for government sponsorship. The survey results indicate that all the universities employed the extension students program as a key strategy for revenue diversification. The contribution of this revenue source to total revenue generated by the university ranged from 14% in Jimma University to 61% in Hawassa university (see table 1). In general most of the revenue from the extension program was generated from the social sciences oriented faculties . While faculties in the social sciences such as the faculty of business and economics had extension students enrolled in almost all the courses offered, the natural sciences oriented faculties had very few courses on offer in the extension program. The medical science faculty for instance could only offer medical laboratory course and in some cases pharmacy. The cost charged by the universities for the extension program ranged from 38 birr per credit hour for social sciences related courses to 61.28 birr per credit for health related courses such as medical laboratory

3.1.2 Summer Students Program

The summer students program is offered to self or company sponsored students during the summer that is mid July to mid September every year. During this period the regular (government sponsored) students are on vacation. The program targets workers who wish to upgrade their qualifications and could not enroll in the extension program due to the distances from the universities. The catchment for the program is therefore not limited to the vicinity of the universities. As indicated in table 3.2, the program was also a key strategy for revenue generation for all the universities. Revenue contribution to total internally generated revenue from this program ranged from 13% in Hawassa University to 54% in

Jimma University. As in the case with extension program, the bulk of the revenue from the summer program was generated from the social sciences related courses especially those in the education and business faculties. The cost charged by the universities for the summer program ranged from 1440 birr per summer for social sciences related courses to 3,000 birr per summer for health related courses. Ministry of education sponsored students however paid between 1,000 and 1,300 birr per summer. Just like the extension program, the summer program could benefit from continuous market research to be sustainable.

3.1.3 Distance Education Program

The distance education program was offered throughout the year to self or company sponsored students who by one reason or the other cannot attend scheduled contact classes. Like the summer program therefore the catchment for this program is not limited to immediate vicinity of the university.

It was revealed that only three universities (Haromaya, Bahir Dar and Mekele) were employing this strategy for revenue generation. Revenue from the distance education program in Haromaya University made up 23 % of the total internally generated revenue, while that of Bahir Dar and Mekele Universities and made up 29% and 10% respectively. As with the case of extension and summer programs, the bulk of the revenue from the distance education program was generated from the social sciences related courses especially those in the education and business faculties. The nature of the program precludes practical oriented subjects from being offered. The cost charged by the universities for the distance education program ranged 40 to 55 birr per credit hour for self sponsored students and 50 birr per credit hour for government sponsored students.

3. 1.4 Short Term Trainings for Organizations and Institutions

Another strategy used by the universities though infrequently is short term trainings for members of staff of organizations and institutions. The short term trainings were mainly offered in computer and management disciplines. Revenue from short term training contributed to up to 6% of total revenue in Adama University, but was less than 3% in the other universities. This strategy was not being fully exploited and with adequate advertising coupled with more offerings the universities could reap more income.

3. 1.5 Consultancy Services

Five universities generated revenue from consultancy services. However, the revenue generated from consultancy services in these universities contributed to less than five percent of internally generated revenue suggesting that the strategy was not being fully exploited. None of the universities advertised for consultancy services despite being reservoirs of experts in many fields. Further the universities had not institutionalized consultancy services. There were no consultancy bureaus in all the universities apart from Mekele University. The universities that generated revenue from consultancy services got 20% of the fees while 80% went to the consultants. With no consultancy bureaus and no advertising, there was a higher likelihood that university staff makes private consultations with no revenue accruing to the universities, thus the meagre revenue from consultancy services.

3. 1.6 Revenue Generated from physical facilities

While all the universities sampled had maintenance workshops and or furniture workshops, only three universities used the workshops for revenue generation (table 5). Revenue generated from the furniture workshop in Jimma University made up 23% of total revenue generated from internal revenue. The contribution of revenue from the other 6 universities from maintenance and furniture workshops was quite low.

The study established that five universities generated revenues from farming (table 6). The contribution of farming revenue to total internally generated revenue ranged from 0.02% in Bahir Dar University to 18% in Hawassa University. While serving as practical teaching areas for the agriculture faculties in the universities, the farms also served as revenue generation sources. Jimma, Haromaya and Hawassa universities engaged in both livestock (mainly poultry, dairy and swine) and crop farming (mainly grains and legumes) while Bahir Dar University largely engaged in dairy farming. Farming activities in Hawassa and Haromaya Universities are more mechanized and organized as compared to other universities.

It was also established that four universities had documented revenues from leasing and renting university buildings and land (table 7). Rental revenues were generated from student and staff lounges, conference rooms and halls and staff houses. Adama University in particular leased idle land for farming. Rental revenue though modest was regular and constant. Adama University generated 7% of internal revenue from leases and rents. In comparison to all the other universities, Adama University is relatively smaller suggesting that more could be generated from leases and rents by the other universities if they fully exploited this strategy. Revenue from registrar office services ranged from 0.02 in Adama University to 7% in Mekele University (table 8). Included in this category of services were documentation services such as transcripts preparation, authentification of certificates, application fees and penalties. This revenue source could form a regular source of revenue if all the registrar charges were to be enforced. All the universities receive donations and grants which were not frequent in nature. Most of these funds were either sourced by the government through the ministries of finance, education or health. Universities need to consciously strategize to secure funding from donor agencies through development and submission of proposals for funding to the donor agencies.

3.2 Comparative Contribution of the Revenue Diversification Strategies to Total Internally Generated Revenue

A comparative analysis of the revenue diversification strategies was carried out using the *Chi Square Test* to reveal the revenue diversification strategies that were heavily relied upon by the universities in generating internal revenue. A result χ^2 = 0.125607, 40 *d.f.* was reported indicating heterogeneity among the revenue diversification strategies. However it is only the extension and summer program that were found to be significant sources of internal revenue for all the universities.

3.3 Contribution of Internally Generated Revenue to University Recurrent Budget

The amounts in for Addis Ababa and Gondar Universities in Figure 2 (a) relate to the estimated revenue for extension and summer program only. For the rest of the universities the amount relate to the total internally generated revenue. The amounts range from 33 million in Bahir Dar University to 7.3

million in Adama University. It is noteworthy to point out that going by the amount generated by the extension and summer programs of Addis Ababa University which is slightly over 30 million; Addis Ababa University could be generating approximately 50million in internal revenue.
Figure 2 (b) indicates the amount of internal revenue that the universities were willing to commit to the recurrent budget. Since the ministry of finance and economic development is often unaware of the amount of revenue generated by the universities, the universities indicate the amounts of internal revenue that they are willing to commit to the recurrent budget. The total amount of the approved recurrent budget from the ministry of finance and economic development will therefore be less the committed figure. This means that the universities commit just a fraction of the total internally generated revenue to the recurrent budget. As a matter of fact in refusing to disclose the amounts generated by internal revenue, the head of finance at Addis Ababa University indicated that he did not want amounts of internal revenue known because that might lead to a reduction on funding from the government.

The amounts internally generated revenue that the universities committed to the recurrent budget ranged from 27 million in Addis Ababa University to Zero in Mekele University. Gondar University on the other and refused to reveal the amounts of internally generated revenue committed to the recurrent budget
Figure 2(c) indicates the percentage composition of the recurrent budgets. 13 % of the recurrent budget in Addis Ababa University is funded by internally generated revenue while internally generated revenue in the rest of the universities contributes to less than 5% of the recurrent budget. Capital budgets are entirely funded by the government.

3.4 Ingredients for Successful Revenue Diversification Strategies

According to World Bank's Task Force on Higher Education and Society survey in 2000 necessary ingredients that allow universities to succeed in revenue diversification were present in Ethiopia (World Bank 2000). A review of the higher education proclamation and the various proclamations for the establishment of the universities with regard to revenue diversification reveals that those universities are legally empowered to own property and provide consultancies. It can therefore be argued that the legal and regulatory environment offers more support than constraints to revenue diversification. This concurs with World Bank`s argument that higher education institutions flourish in a legal and regulatory environment that encourages innovation and achievement, while discouraging corruption and duplication of effort.

The government has also decentralized much of the administrative, budgetary and other responsibilities to individual universities in the interest of greater institutional autonomy, flexibility and responsiveness. Much of the reform accomplishment with regard to Makerere University which has been hailed by the World Bank (2000), has been credited to the commitment, energy and imagination of the university leadership. As a result of government support, the university management had greater autonomy than ever before to make structural decisions affecting the institution, including the ability to raise funds from private sources. The University recognizes that many of the changes could only take root through a consultative policy-making process and an inclusive and participatory system of governance.

4.0 Conclusions and Recommendations

While the universities were employed a variety of strategies to varying degrees, only the extension and the summer program was found to significantly contribute to internally generated revenue, this indicates that the rest of the strategies are not being fully exploited by the universities. This notwithstanding, universities needed to introduce demand driven academic reforms if the self sponsored programmes were to be sustainable. Continuous labor market scanning and curriculum review was necessary to ensure that the universities anticipate and plan for the changing enrolments in the various courses.

Consultancy services could generate more income if the universities institutionalized the services, advertise and institute overhead charges for external fee earning activities performed by members of staff. Jimma University's experience with commercialization of the maintenance workshop in furniture production was worth emulation by other universities. Universities have potential for income generation in computer and vehicle workshops maintenance related services.
While most of the universities have established revenue generation offices, the mandate of the officers were limited to coordination besides having other teaching or administrative responsibilities. Universities could consider the Makerere University and University of Nairobi example where wholly owned enterprises headed by competitively sourced chief executives on performance contracts with the full mandate manage such revenue generation centres.

The limitations inherent in implementation of revenue diversification strategies included allocation of more time to teaching at the expense of research and a skewed potential for revenue diversification across faculties. In this regard, universities needed to strike a balance between teaching and research by setting limits on how much extra paying teaching load could be taken by lecturers. Universities could also consider cross subsidizing those faculties with low income generation potential with income generated from faculties with high income generating potential.

References

Association of African Universities, 1997. Revitalizing Universities in Africa: Strategy and Guidelines. Washington, DC: World Bank.

Court, D., 1999. Higher Education Financing in Africa: Makerere, The Quiet Revolution". Washington DC: The World Bank and the Rockefeller Foundation

Government of Ethiopia, 2003. Higher Education Proclamation, No. 351/2003".Addis Ababa: Negarit Gazeta

Johnstone, B., 2003. Higher Education Finance and Accessibility: Tuition Fees and Student Loans in Sub-Saharan Africa. Paper presented at the Africa regional training conference: 'Improving Tertiary Education in Sub-Saharan Africa: Things that Work!' Accra, Ghana

Kathuri, N. J., and Pals, A.D., 1993. Introduction to Educational Research. Njoro, Egerton University.

Ministry of Education, 2005. Education Sector Development Program II 2005/6-2010/11. Addis Ababa: Ministry of Education.

Mkude, D., 2003. Contracting Non-Academic Services to Private Providers: The Dar es Salaam Experience. Paper presented at the Africa regional training conference: 'Improving Tertiary Education in Sub-Saharan Africa: Things that Work!' Accra, Ghana.

Okwach, A., 2001. Revitalizing Financing of Higher Education in Kenya: Resource Utilization in Public Universities. Association of African Universities;http://www.aau.org/studyprogram/pdfiles/abagi.pdf [accessed on 10 Dec. 2007]

Saint, W., 2005. Higher Education in Ethiopia: The Vision and Its Challenges. Washington, DC: World Bank

World Bank, 2000. Higher Education in Developing Countries: Peril and Promise. Washington, DC: World Bank

Yizengaw, T., 2003. Transformations in Higher Education: Experiences with Reform and Expansion in the Ethiopian Higher Education System". Keynote speech presented at the Africa regional training conference: 'Improving Tertiary Education in Sub-Saharan Africa: Things that Work!' Accra, Ghana.

Appendices

Figure 1: The amount of revenue generated by each revenue diversification strategy (million birr)

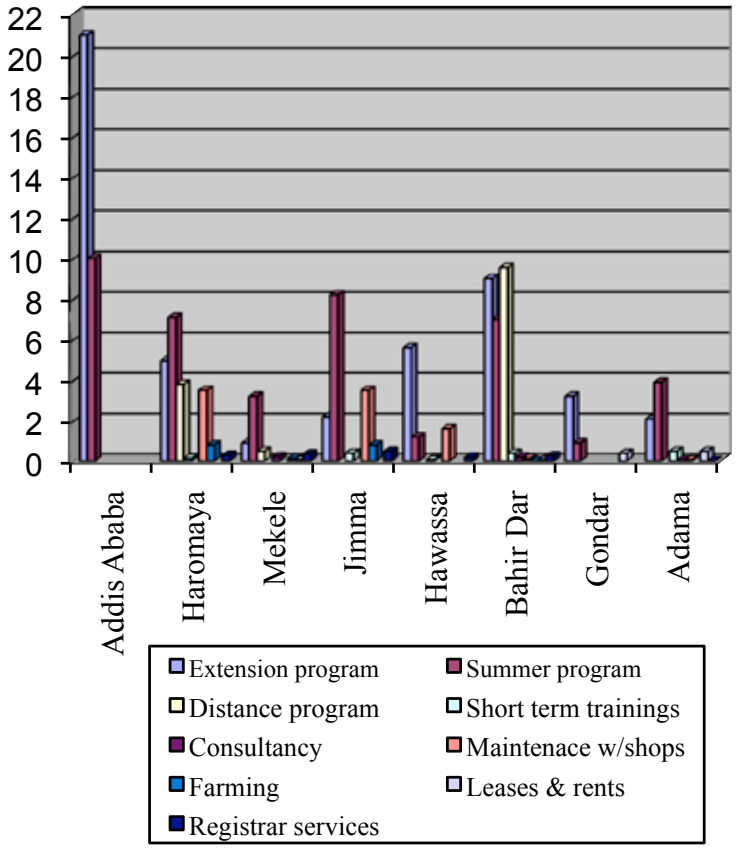

Table 1 Revenue Generated from Extension Students Program

University	*Contribution to total generated revenue*
Addis Ababa University	*
Haromaya University	30%
Mekele University	17%
Jimma University	14%
Hawassa University	61%
Bahir Dar University	27%
Gonda University	*
Adama University	29%

Table 2: Revenue Generated from Summer Students Program

University	*Contribution to total generated revenue*
ddis Ababa University	*
Haromaya University	43%
Mekele University	59%
Jimma University	54%
Hawassa University	13%
Bahir Dar University	21%
Gonda University	*
Adama University	53%

Table 3: Revenue Generated from Short Term Trainings for Organizations

University	*Contribution to total generated revenue*
Addis Ababa University	*
Haromaya University	0.8%
Jimma University	3%
Hawassa University	0.8%
Bahir Dar University	1%
Gonda University	*
Adama University	6%

Table 4: Revenue Generated from Consultancy Services

University	*Contribution to total generated revenue*
Addis Ababa University	*
Mekele University	4.3%
Hawassa University	1%
Bahir Dar University	0.6%
Adama University	0.6%

Table 5: Revenue Generated from Maintenance/Furniture Workshops

University	*Contribution to total generated revenue*
Jimma University	23%
Bahir Dar University	0.4%
Adama University	0.7%

Table 6: Revenue Generated from Farming

University	*Contribution to total generated revenue*
Haromaya University	3%
Mekele University	2.5%
Jimma University	5%
Hawassa University	18%
Bahir Dar University	0.02%

Table 7: Revenue from Leases and Rents

University	*Contribution to total generated revenue*
Addis Ababa University	*
Mekele University	1.3%
Bahir Dar University	0.2%
Adama University	7%

Table 8: Revenue from Registrar Services

University	*Contribution to total generated revenue*

Addis Ababa University	*
Haromaya University	2%
Mekele University	7%
Jimma University	3%
Hawassa University	2%
Bahir Dar University	0.2%
Gonda University	*
Adama University	0.02%

*Respondents unwilling to reveal internally generated revenue

Figure 2(a): The Size of Recurrent Budget in Relation to Total Internally Generated Revenue (Million Birr)

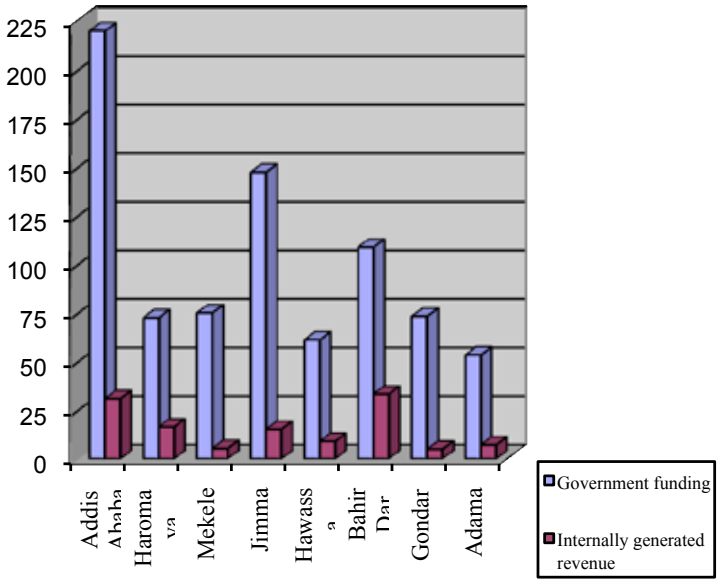

Figure 2(b): The Size of Recurrent Budget and Internally Generated Revenue Committed to Recurrent Budget (Million Birr)

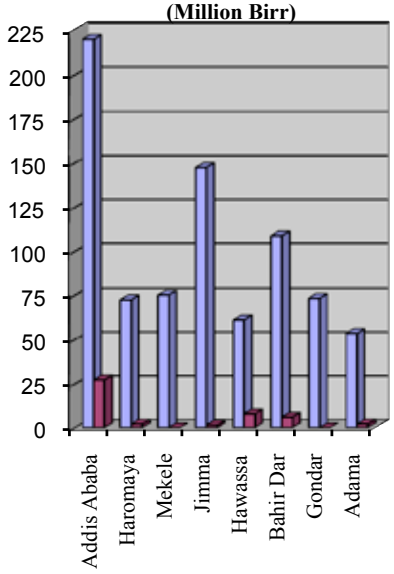

Figure2(c): Composition of Recurrent Budget