

## **Cost-Sharing and Students' Affordability at Selected Public Colleges of Education in Zambia**

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### **Abstract**

*The study investigates Cost-Sharing at Public Colleges of Education as a mechanism being implemented to respond to diminishing government funds. Specifically, the study sought to establish students' affordability in the era of Cost-sharing and reduced government funding. An Embedded mixed method design was used in which qualitative data played a supplementary role to quantitative data. Inferential statistics was used to analyse quantitative data. The study sample consisted of 248 respondents. Key findings of the study indicated that user fees were not affordable to students at the two colleges and that students faced difficulties in paying fees promptly and more students had challenges in financing for their living expenses. Poor socio-economic status especially low-income level was the major constraint on students' affordability. Therefore, the challenge of affordability had been compounded by the lack of financial aid to students at public colleges. Henceforth students' affordability could be realised if there was a reform to the tertiary education-financing framework that was backed by sustained political will coupled with sustainable resources. The study recommended to Ministry of General Education that it should consider: introducing a funding formula based on unit cost and extending students' loans to needy students at public colleges.*

**Key words:** Affordability, Cost-sharing, Government grants, User fees.

### **Background to the Study**

Recent years have witnessed dramatic changes coupled with contested shift in the burden of higher education costs from being borne predominately by government or tax payers to being shared with parents and students (Johnstone, 2006). Consequently, Cost-sharing had taken a centre stage in higher education financing as an alternative that had been put in place to respond to diminishing government funds. As a result, higher education institutions (HEIs) were steadily being required

to raise significant shares of their revenue from private sources as opposed to relying on public funding (Johnstone: 2003; 2006; World Bank, 1994; 2010). Therefore, the burden of higher educational costs worldwide has been shifted from government to students and families.

Council of Ministers of Education (CMEC) stated that in the face of these increasing expenses borne by students and parents, national education systems and individual institutions faced the challenge of maintaining higher education accessibility especially for the poor, minority, rural and other traditionally underserved populations (CMEC, 2007). This challenge was necessitated by the increasing income disparities being experienced in most countries of the world. However, in the US and other developed countries, the principle of expanding higher educational opportunity and affordability was being met among other ways with government guaranteed available student loans and a tradition of philanthropic giving (CMEC, 2007). According to Johnstone (2006), an economy with abundant part-time employment opportunities, the general availability of need-based grants and easily accessible higher education alternatives with commuting range of home aid students in developed countries.

Unfortunately, elsewhere in the absence of these remedies available in developed countries, and absence of public policies to maintain accessibility and affordability, there was reason to believe that higher education would become increasingly unattainable to all but the affluent (CMEC, 2007). Particularly, it is in countries such as Zambia where the absence of such remedies would exclude students from disadvantaged backgrounds to afford higher education. Moreover, in the absence of alternative public revenue, it would mean that either that the colleges and universities would have to limit enrolments and continue to serve only the elites or would be maintained at such levels of overcrowding as a result of over enrolments and that would compromise quality (CMEC, 2007).

In Zambia, the education system crippled by the late 1970s due to the decline in the economy resulting from the dramatic fall in copper prices caused by world economic recession, as well as the closure of the traditional export/import routes and rampant world inflation (Kelly, 1991; Gillies, 2010; Whitworthy, 2013). These economic crises lead to many policy shifts to respond to diminishing government funds among them being cost-sharing. Therefore, Cost-sharing was introduced at postsecondary education level in 1989, from a government policy on the financing of higher education that was heavily subsidized (Mweemba, 2003). The introduction of Cost-sharing was met with resistance from students across the country (Mweemba, 2003). This was reflected by demonstrations staged by students at both colleges and universities. For example in Kabwe, the police detained 210 students from Nkrumah Teacher Training College on 13<sup>th</sup> of April, 1989 for demonstrating against the Cost-sharing scheme (Mweemba, 2003).

However, the World Bank (2010) stated that the introduction of Cost-sharing without financial aid would exacerbate existing disparities between the well-off and the much larger numbers of the poor, between urban and rural populations, and the marginalised groups. Regrettably, for Zambia, the bursary scheme, the only financial aid available to students was discriminatory against students in other higher learning institutions for its potential beneficiaries are only some of those admitted at the University of Zambia and the Copperbelt University (Mukanga, 2013). Therefore, the purpose of this study was to examine students' affordability in the era of Cost-sharing and reduced government funding at Public Colleges of Education.

### **Statement of the Problem**

Growing demand for postsecondary education had placed increased pressure on public finances and had led to greater Cost-sharing. From an international perspective, increased parental savings, income from part-time work, private debt, and student loan contributions all attested to this shift (CMEC, 2007). In Zambia, it was not clear how students and public colleges have dealt with challenges of Cost-sharing and reduced government funding.

While numerous studies have been undertaken to examine cost-sharing in higher education (see Oketch (2003), Mweemba (2003), Chihombori (2013), Masaiti and Shen (2013), Mwelwa (2014), and Masaiti (2015)), it appears students' affordability had remained a challenge especially for the underprivileged in Zambia. Moreover, there are limited measures that have dealt with students' affordability at public colleges where students had no access to financial aid. Consequently, if nothing was done to bail out public higher education (HE) system in Zambia, it will increasingly become a preserve for the haves, excluding the have-nots.

### **Objectives**

The main objective of the study was to establish if students could afford the (current) user fees at the public colleges of education.

### **Literature review and Theoretical underpinning of the Study**

The study was underpinned by Neo-Liberal Ideology as proposed by Levidow. Levidow argued that the ongoing developments in higher education and the pressure on universities and colleges to generate additional sources of income had forced these institutions into marketizing higher education (Levidow, 2005). His argument forces higher learning institutions to adopt marketing strategies to generate income in order to supplement the diminishing state financial resources earmarked for higher education (Masaiti and Shen, 2013). Therefore, applying the theory to this study, it is proposed that part of user fees and government grants that public colleges received could be used to finance college enterprises such as large-scale (commercial) farming, and that erring students in addition to general workers could be used as labour. By so doing, individual institutions could raise funds to supplement government grants for its capital and operational costs. Consequently, it is hoped that students' affordability would be enhanced.

A study conducted by Long and Riley (2007) in the United States revealed that there were many barriers to college access and success for low-income and minority students. The research revealed that the average cost of tuition and fees at public four-year colleges and universities had been increasing over the years. For example, from 1976 to 2005, the average cost of public four-year institution increased from \$617 to \$5, 491 in nominal terms, or by 270% when adjusted for inflation (Long and Riley, 2007). This increase was because of skyrocketing prices over the last several decades. On the other hand, the median family income did not keep pace with the ever-escalating tuition costs whereas income levels increased only by 23% in real terms during the same period. The federal Commission on the future of Higher Education concluded that there was no issue that worried the American public more about higher education than the soaring cost of attending college (Long and Riley, 2007).

The other major impediment to higher educational affordability for many students, particularly those from low-income families was the complexity of financial aid systems and lack of accurate

information about higher education costs (Long and Riley, 2007). The study revealed important barriers to higher education accessibility and affordability. However, the study by Long and Riley was highly biased towards student loans and scholarships as ways of helping the disadvantaged people yet there exist other ways of affording the unaffordable in the era of Cost-sharing and reduced government funding.

A study conducted by Morely (2012) in Ghana and Tanzania revealed that higher education was highly inequitable as it is skewed towards the males, richer families and urban households (Morely, 2012). For example, women students often have higher dropout rates than men due to the cultural emphasis on family obligations, which was often in conflict with their desire to pursue advanced studies (Morely, 2012). In Ghana and Tanzania, Morely (2012) found that students from low socio-economic backgrounds were under-represented in higher institutions in virtually all disciplines. Furthermore, Morely (2012) demonstrated that current schemes to assist young people from disadvantaged backgrounds to enter higher education are not working, yet these marginalised groups ought to be targeted more effectively. Often, public funding mechanisms act to exacerbate such inequities by providing free higher education to the ‘best’ students who consistently come from the wealthiest households that had access to the best secondary schools (Morely, 2012; Pillay, 2009).

On the other hand, students from rural households face enormous barriers to accessing higher education in general, and those who access it have challenges of affording higher education in particular (Gurgand et al., 2011; Boit, 2012). It should be emphasized that while gender affects female participation in higher education to a lesser extent, access to this form of education is often dependent upon one’s income level. Woodhall (2004) stressed that participation in higher education is often dominated by students from the highest income quartiles of the population in countries such as Kenya, Tanzania, Namibia, Malawi, and Zambia. The study by Morely (2012) was relevant to the current study because it revealed significant factors that hinder higher education participation but the study was not comprehensive enough to ascertain practical ways in which HE could be made affordable especially to the disadvantaged populations. Hence the need for this study.

A paper presented by Tilghman at the symposium on equity and access in higher education revealed that Princeton had dedicated itself to making college affordability one of its foremost priorities (Tilghman, 2007). Princeton financial well-being had been greatly strengthened by its endowment and alumni annual giving in which use of resources was prioritized on educating more students and ensuring full students’ support once on scholarship. The climax of Princeton success was witnessed in 2001 when the institution introduced no-loan policy to every student in need of financial aid in which financial aid was provided solely based on need as opposed to merit, and grants were designed to meet full financial need (Tilghman, 2007).

**Table 1** below compares the impact of Princeton financial aid program for the class of 2001 and 2010 class.

**Table 1 Impact of Princeton’s financial aid enhancements**

	<b>Class of 2001</b>	<b>Class of 2010</b>
Students on Financial Aid	432 (38%)	682 (55%)
Low-Income Students	88 (8%)	182 (15%)

Minority students	290 (26%)	456 (37%)
Average Scholarship	\$15,064	\$29,786
Percentage of Tuition Covered by average Scholarship	65%	90%
Average Loan	\$3,455	\$0
Expected Debt at Graduation	\$13,820	\$2,500 (for education-related expenses)

(Source: Adapted from Tilghman, 2007)

The paper presentation by Tilghman was an exceptional achievement in the field of higher education finance in that measures used do not seem sustainable. Additionally, Princeton finance aid system neglect other ways of outsourcing funds such as entrepreneurships and student loans hence making this study unavoidable.

Another classic example of affordable higher education comes from Baba Aya Singh Riarki College in rural India. The college was catering to the higher education needs of rural girls who otherwise might not have attained higher education (Ghuman and Singh (2013). The study used the data gathered from college records and answers of 75 random selected college students to the survey questionnaire. The uniqueness of the College was access to and affordability of college education. The students had to pay only Rs. 800 (about US \$ 15) as the annual tuition fee and Rs. 5,500 (about US \$ 100) as the annual payment for hostel and food, and that the entire expenses of the college were met by that amount and the produce from agricultural land of the college (Ghuman and Singh (2013). Despite the fact that the study was conducted at a private college, the study provided valuable insights towards affording college education in a rural set-up. However, the study was biased towards students and college's contribution hence overlooked other possible ways of outsourcing funds. Hence, this study was necessary.

A study by Masaiti (2015), revealed that Zambia's higher education sector especially public university was faced with a multitude of problems and challenges, ranging from access and affordability, participation and enrolment, finance among others. However, the study by Masaiti (2013; 2015) focused on public universities where students had access to financial aid. On the other hand, the focus of this study was on public colleges where students had no access to financial aid. Moreover, the study by Masaiti (2015), did not focus on students' affordability hence this study was inevitable.

## **Methodology**

The study used an Embedded Design in which qualitative data type played a supplemental role within the quantitative data type. The study was conducted at two districts of the Copperbelt Province. The study population was the entire population of Colleges A and B which included two principals/vice principals, two accounts officers, eleven heads of sections, twenty seven lecturers and 205 students derived from the two colleges and one planner from the Ministry of General Education. Therefore, the total sample size was 248 respondents; 131 from College A, 116 respondents from College B and one respondent from the Ministry of General Education Headquarters. The study used both probability and non-probability sampling; under probability sampling technique, stratified random sampling was used to select student and lecturer respondents. Under non-probability, purposive and convenient sampling techniques were used to select principals, account officers, heads of departments and a planner. Inferential statistics were used to analyse quantitative data from semi-structured questionnaires and quantitative data through

document analysis was used for purposes of comparison from interviews and to show trend analysis for the period for which data was provided. Qualitative data from semi-structured interviews and focus group discussions were embedded into quantitative data.

## Findings and Discussion

### Students' affordability

The objective of the study was to establish if students could afford current user fees at the two public colleges of education. To get views on this matter a questionnaire was used for students and lecturers while interviews were also conducted on administrators and accounts officers. A 5-point Likert scale with the following ranks; **1= Strongly disagree, 2 = Disagree, 3 = Neutral, 4= Agree, 5 = Strongly agree** were used to express the level of agreement with the factors concerning affordability.

Firstly, the social factors investigated in this study were subjected to Spearman' rho. The results indicated that among the nine factors investigated; only sponsor's monthly income was statistically significant as shown on table 2.

**Table 2: Correlations between sponsors' monthly income and students /parents' ability to pay user fees**

Spearman's rho			Sponsor's monthly income	Parents/student s can afford to pay user fees
		Sponsor's monthly income	Correlation coefficient	1.000
Sig. (2tailed)			.	.001
N			205	205
Parents/student can afford to pay user fees		Correlation coefficient	.236**	1.000
		Sig. (2tailed)	.001	.
		N	205	205

\*. Correlation is significant at the 0.01 level (2-tailed).

To start with, Spearman's Rho was appropriate for this variable because the data set used was categorical or a ranking based on the level of agreement on the five point Likert Scale. The results from table 2 indicated the correlation coefficient of .236 implying that there was a positive correlation between sponsors' monthly income and parents/students ability to pay user fees. The positive association implies that if sponsor's monthly income increases then parents/students' ability to pay user fees also increases. In addition, the Spearman Correlation test also show that there is a statistically significant association between the two variables at the confidence level of 0.01 and significance value of .001.

**Are user fees affordable to students?**

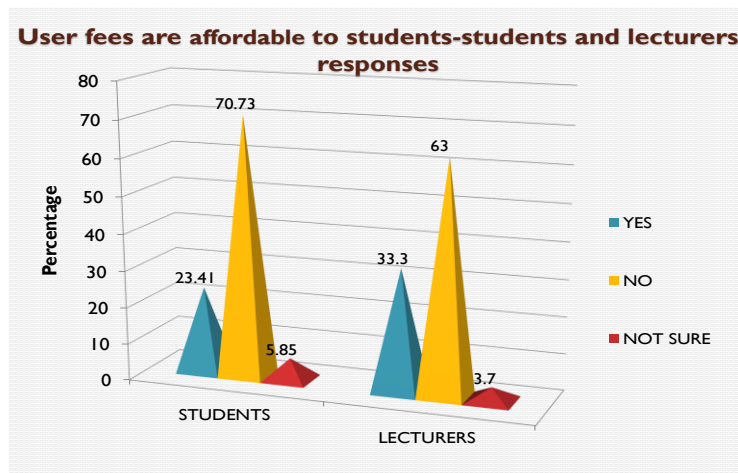


Figure 1

Figure 1 indicates that 70.7% of students’ respondents indicated that user fees were not affordable to students while 63% of lecturers indicated that user fees were not affordable. While some students could afford to pay user fees promptly, there was a considerable number of students that struggled to pay fees. Moreover, most students had serious challenges in financing for their living expenses hence compromising on students’ welfare. Interviewed respondents expressed mixed feelings as to whether fees were affordable or not. It was further discovered that few students had challenges in paying fees but the majority of them faced challenges with financing for other expenses that came with college education as indicated in **figure 2**.

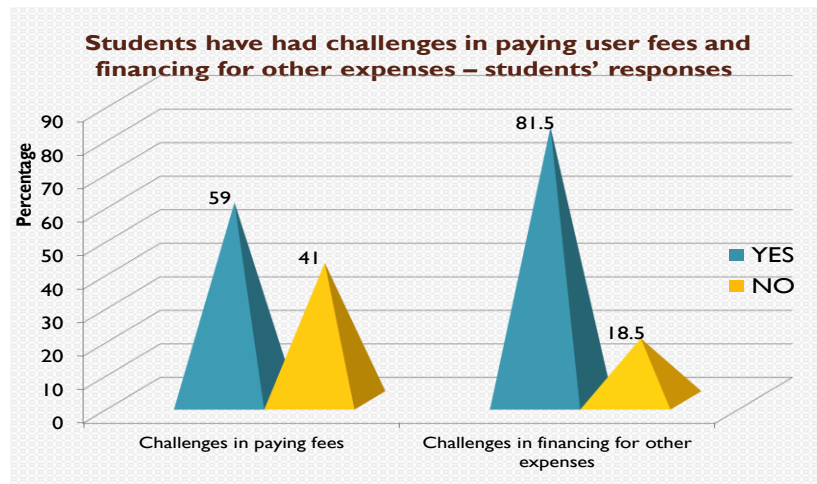


Figure 2

Figure 2 indicates that 59% had problems in paying user fees while 41% had not experienced problems in paying fees. Figure 2 further shows that 81.5% indicated that they had problems in paying for the cost of living while a few (18.5%) had no challenges. Information collected through qualitative methods were similar to what quantitative information indicated.

Most students are faced with challenges to cater for other expenses that come along when schooling hence some may not have problems in paying fees but may have problems of financing for other expenses’ (5/11/ 2015).

From the responses from the students and lecturers, it was obvious that user fees were not affordable to most students. Some students were even forced to write deferred examinations, as they could not pay fees on time. From the researcher’s observation, the majority of students had problems in financing for living expenses since students were coerced to pay fees at the expense of their livelihood. These findings although similar to Oketch (2003), they are however different in that Oketch (2003) did not show the extent to which students were impacted by user fees or indeed Cost-sharing as a whole. However, Oketch (2003) clearly indicated that higher education affordability had remained a challenge for most of the Sub-Saharan African region. However, Oketch (2003) was optimistic that opportunities existed in which the unaffordable could be made affordable.

Furthermore, the variables were cross-tabulated against gender and the results showed that there was a significant statistical difference between gender and students having had difficulties in paying fees.

**Table 3: Gender\*Students have problems in paying fees Cross tabulation**

		Students have had problems in paying fees				Total
		Strongly disagree	Disagree	Agree	Strongly agree	
Gender	Male	37	29	15	14	95
	Female	32	22	31	25	110
Total		69	51	46	39	205

**Table 4: Chi-Square Tests Decision Box**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.941 <sup>a</sup>	3	.030
Likelihood Ratio	9.056	3	.029
Linear-by-Linear Association	7.027	1	.008
N of Valid Cases	205		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 18.07.

- i. **Null hypothesis (H<sub>0</sub>):** There was no association between gender and students faced difficulties in paying fees.
- ii. **Alternative Hypothesis (H<sub>1</sub>):** There was an association between gender and students faced difficulties in paying user fees.
- iii. **Interpretation of Chi-Square results from table 4:** The results show the p- value of 8.941<sup>a</sup> which was associated with the significance value of 0.030. Therefore, since the significance value (0. 030) was less than 0.05 we reject the null hypothesis and accept the alternative hypothesis. To this end there was an association between gender and students had difficulties in paying fees.



The association entailed that more females faced challenges in paying fees promptly than males. However, it must also be understood that while gender affected female participation in tertiary institutions to a lesser extent, this study has shown that affordability to this form of education is often dependent upon one's income levels. These findings are similar to the findings revealed by Morely (2012) in Ghana and Tanzania regarding one's income levels.

In addition, the colleges were also alive to the fact that some students were vulnerable. To this effect, some measures were put in place in order to cater for the needs of the underprivileged students. For example, the college management allowed students to pay user fees in instalment although the scheme was not open to all students. The study revealed that the college had a system in which they identified students that were genuinely handicapped and allowed them to pay fees in instalment. Other notable contributions by the college management was in the form of in-kind payment in which some students were allowed to pay fees in form of foodstuffs such as meal samp and maize, mostly meant to assist students that came from the rural or whose sponsors were farmers. The findings of this study were contrary to what Tilghman (2007) unveiled about Princeton. On the contrary, Princeton provided financial aid (grants) to meet full financial need of students. This study was also contrary to what Ghuman and Singh (2013) revealed about affordable higher education at Baba Aya Singh Riarki College in rural India. Ghuman and Singh (2013) revealed that the entire expenses of the college were met by the meagre amount paid by students and largely through the produce from agricultural land of the college.

### **Conclusion and Recommendations**

While some students were able to pay user fees promptly, most students were unable to cater for their living expenses hence compromising their livelihood while attending college. Students' affordability continued to be a challenge for most students due to poor socio-economic particularly low-income levels. The challenge of students' affordability and financial austerity at the institutions had been compounded by the lack of financial aid to students in public colleges in Zambia. Therefore, affordability and financial sustainability can only be realised if there was a reform to the higher education financing framework that was backed by sustained political will coupled with sustainable resources. Based on the findings of the study, the following recommendations were suggested to Ministry of General Education should; consider introducing a funding formula based on unit cost, extend students' loans to needy students at public colleges and prioritise funding to capital projects and equity concerns.

### **References**

- Boit, M. (2012). 'Equity Implications of Financing Students in Higher Education through a Student Loan Scheme: The case of Kenya Higher Education Loans Board.' *International Journal of Current Research* 4 (3): 247-251.
- Chihombori, D. (2013). 'Cost-Sharing in Higher Education Financing in Zimbabwe, 1957-2009.' Unpublished Master's Thesis. University of the Western Cape.
- CMEC, (2007). *Literature Review of Postsecondary Education Affordability in Canada*. Toronto: Tandem Social Research Consulting.

Ghuman, R. S and Singh, I. (2013). 'Providing affordable higher education to rural girls in Indian Punjab: A case study of Baba Aya Singh Riarki College.' In *Annals of the University of Petroşani, Economics* 13 (2): 61-84.

Gillies, J. (2010). *The power of persistence: Education system reform and Aid Effectiveness*. EQUIP 2: 99-111.

Gurgand, M; Lorenceau, J.S.A and Melonio, T. (2011). *Student Loans: Liquidity Constraints and Higher Education in South Africa*. Agence Française de Développement Working Paper No. 117. Retrieved on 19/12/15 from SSRN: <http://ssrn.com/abstract=1969424>.

Johnstone, D. B. (2003). 'Cost-Sharing in Higher Education: Tuition, Financial Assistance, and Accessibility in a Comparative Perspective.' *Czech Sociological Review*. 39 (3): 351-374.

Johnstone, D. B. (2006). 'Financing Higher Education: Cost-sharing in International Perspective.' In Altbach, P.G. (ed.). *Global Perspectives on Higher Education*. Boston: College Centre for International Higher Education.

Johnstone, D.B. (2008). *Financing Higher Education: Some Special features of Formerly Socialist Europe*. Buffalo: University at Buffalo Centre for Comparative and Global Studies in Education Project.

Kelly, M.J. (1991). *Education in a Declining Economy: The Case of Zambia, 1975-1985*. Washington, DC: World Bank.

Levidow, L. (2001). 'Marketizing Higher Education: Neo-liberal Strategies and Counter Strategies.' *Education and Social Justice* 3 (2): 12-24.

Long, B. T and Riley, E. (2007). 'Financial Aid: A Broken Bridge to College Access?'. *Harvard Educational Review* 77 (1): 39-45.

Masaiti, G and Shen, H. (2013). 'Cost-Sharing in Zambia's Public Universities: Prospects and Challenges.' *European Journal of Educational Research*. 2 (1): 1-15.

Masaiti, G. (2015). 'Effectiveness and Viability of Revenue Diversification in Sub-Saharan Africa's Higher Education: Examining Zambia's Public Universities.' In *International Journal of Humanities Social Sciences and Education (JHSSE)* 2 (5): 33-44.

Morely, L. (2012). 'Widening participation in higher education in Ghana and Tanzania.' *International Higher Education* 67 (Spring): 21-23.

Mukanga, C. (2013). *Funding Higher Education in Zambia: Zambia Economist*. Retrieved on 04/09/2015 from [http://www.zambia\\_economist.com](http://www.zambia_economist.com).

Mweemba, D. (2003). 'The Coping Strategies of the University of Zambia Students with Cost-Sharing in Financing Higher Education.' Unpublished Master's Dissertation, University of Zambia.

Mwelwa, K. (2014). 'Implementation of the Student Loans Scheme as a Viable Cost-Sharing Measure in promoting equitable access to Higher Education in Zambia: Perspectives of selected stakeholders in the education sector.' Unpublished Master's Dissertation, University of Zambia.

Oketch, O. M. (2003). 'Affording the Unaffordable: Cost Sharing in Higher Education in Sub-Saharan Africa.' *Peabody Journal of Education*. 78 (3): 88-106.

Whitworthy, A. (2013). '*Explaining Zambian Poverty: A History of (non-agriculture) Economic Policy since Independence.*' *Zambian Voice*: Lusaka.

Woodhall, M. (2004). 'Student Loans: Potential, Problems and Lessons from International Experience.' *JHEA/RESA* (2): 37-51.

World Bank. (2010). *Financing Higher Education in Africa*. Washington D.C: World Bank.