

The southern africa researchers university association economics essay

[Economics](#)



At higher level, although there has been a general increase in enrolment at the tertiary level, access and participation have been highly inequitable (UNDP, 2011). Government data shows that enrolment level especially in public colleges rose by nearly 50 percent between 2004 and 2005, but stagnated thereafter. The increase has been argued and attributed partly to the self-sponsorship scheme introduced by the colleges in which they were allowed to raise additional revenues for expansion. Another way in which government helped in increasing access was to diversify courses and encouraged private sector involvement (MOE, 2011). Access to higher education in Zambia has been estimated to be in the region of between 5-7%, though some still contend that it could be lower especially if we consider strictly university education. The world average for middle-income economies is between 20 and 30 percent. Data for private universities is yet to be collected and verified. For instance, in 2009 a higher education body indicated that 300, 000 young people drop out of the education system each year without acquiring the necessary skills for personal advancement or labor market participation. Out of this number, the vocational education and training system is only able to absorb 14, 000 annually and universities are only able to absorb approximately 5, 000 (Nkanza, 2009). The current potential demand for tertiary education, estimated at 1. 63 million youths by the Ministry of Science, Technology and Vocational Training, was very high, and far from being satisfied (UNDP, 2011). There is basically two big reasons for the mismatch, one is that the institutions do not have the capacity to admit all qualified applicants and second is that some institutions are too strict with their selection criterion. As discussed in later sections of this

chapter, sustainability of institutions of higher education is being affected by mounting debts brought about by delayed payments to retired and laid-off staff. In addition, the shortage of professional staff is spurring a continued decline in quality especially in public universities. Figure 3. 5, shows enrolment figures in Zambia's big three public universities; university of Zambia (UNZA), Copperbelt University (CBU) and Mulungushi University (MU). study. Since 1964, when Zambia became politically independent from British colonial rule, education had become a major public agenda item for the development of human capital. With one major public university founded in the years after independence and later three, funding has usually remained the responsibility of the central government because of government's policy of using education as a tool for socio-economic development. As Hoffman (1996) indicated, " in the intermediate afterglow of newly found independence, many countries in sub-Saharan Africa looked at higher education as one of the essential elements of economic and political revitalization, and in some instances, as the cornerstone of a new society" (p. 83). Education, since independence, is seen as a tool for developing the manpower capabilities of the nation. After creation of the first public university, Zambia followed ' a full government support model' in management of this institution. In this model, government was equipping and providing learning facilities, which among others included lecture halls, libraries, accommodation, recreation facilities, staff salaries and development. Because of lack of capacity, Staff was to a large extent sent overseas to train and prepare academics to take over from a largely expatriate faculty (Coburn, 1993; Kelly, 1991). In this model, students were

also fully supported and had an opportunity of residing in the university hostels. The food and accommodation were fully catered for. In addition, students were also paid allowances for other necessities. Students in institutions of higher learning were enjoying what one would describe as a ‘ five star accommodation’. Since Zambian economy was (is) heavily dependent on the copper mining which also sustained public higher education, with the decline of the economy in the late 1970s, 80s and 90s. Compounded by population growth and growing ‘ massification’, public resources or tax payers could no longer sustain the status quo of public universities. These had a great toll on these institutions and were now faced with multifaceted challenges (MOE, 1996; SARUA, 2012). As a way of improving fortunes of public universities government in the policy document of 1996, crafted new policy guidelines regarding financing of higher education. The policy was premised on cost-sharing, revenue diversification and introducing student loans (MOE, 1996). Public universities in Zambia operate under the 1987 university act. This stipulates how universities should be established, managed and how they are linked to the ministry of education. The ministry of education which funds these institutions plays a supervisory role though not very direct. Universities are assumed to be quartz government (Semi-autonomous) (University act, 1987). Currently, there are eleven universities in Zambia: five are public and six are private. Another three are seeking registration, which will bring the total to 14. Most universities offer only undergraduate programs while a few offer postgraduate degree programs in different academic fields (MOE, 2010c).

Public Universities: University of Zambia (UNZA)Copperbelt University

(CBU)Copperbelt Teachers University (CTU) (Upgraded)Mulungushi University (MU)Nkrumah University (NU) (Upgraded)Private Universities: Adventist University (AU) (Church)Cavendish University (CAU)Copperstone University (CU)Northrise University (NU)Zambia Catholic University (ZCU) (Church)Zambia Open University (ZAO)In addition to the eleven universities, the Southern Africa Researchers University Association (SARUA) indicates that Zambia has 43 publicly funded higher education institutions and colleges, offering either diploma or certificate qualifications, of which ten are teacher training. The report further shows that Zambia has about 32 privately funded higher education institutions and 227 technical and vocational institutes (SARUA, 2012). As the case is in most of Africa, private higher education institutions get no just funding from government (directly or indirectly). Usually, private institutions offer low quality and usually profit oriented. This is elucidated by the SADC Report: The Map (See Figure 3. 2) illustrates some of the higher education institutions that are found in Zambia. Nkurumah and COSETCO colleges of education were recently transformed into public universities by government. Some stakeholders though still contend that this process was a political undertaking rather than a true transformation (Cheyeka, Mulenga & Masaiti, 2011)The following are brief profiles of the three fully fledged and two upgraded public universities currently operational in Zambia. The University of Zambia is Zambia's largest public university. Due to the lack of trained human resources in the country after independence, much pressure was exerted on the University of Zambia to increase the pool of qualified people from which the nation could draw (Mwanakatwe, 1968). Lulat (2003) argues that, at the opening of the

University in 1966 with a mere 312 students, a committee had recommended that " within five years this number should be doubled". Instead, the figure reached more than 1, 000 students by 1970. Four years later, there were 2, 500 students. In 1980, there were just fewer than 4, 000. Student admissions for the first year rose from 800 to 2, 000 in just two years, from 1999 to 2001 (UNZA, 2010). By 2010, the University of Zambia had a total student population of 12, 008 students, of whom 7, 135 (61%) male and 4, 873 (39%) female (UNZA, 2010). There are around 900 members of staff. It is the biggest public university, located in the capital city of Zambia, Lusaka. Currently, the University has 9 schools, namely: Education, Law, Humanities and Social Sciences, Veterinary Medicines, Engineering, Natural Sciences, Mines, Agriculture and Medicine. It also has a number of directorates, including: the Institute of Distance Education, Directorate of Research and graduate studies among others (UNZA, 2010). University of Zambia follows a semester system. About 80 percent of its undergraduate students are in some way subsidised by the government (UNZA, 2012). Copperbelt University (CBU) is the second largest public university with a student population of approximately 8, 000 (Post Newspaper, 2012) It is located in the mining town of Kitwe and employs around 240 staff members. CBU was founded in 1987, but initially started as a satellite university of the University of Zambia. A new University of Zambia Act that came into operation in 1979 provided a definitive constitution for this federal structure (UNZA, 1990). However, in 1987 the Act was reviewed and it was consequently decided to abolish the federal structure. Two Acts were passed establishing two autonomous universities, namely the

University of Zambia and Copperbelt University (Carmody, 2004; Kelly, 1999). In 1989 CBU was accredited by the Ministry of Education. Its main affiliation and membership is with Association of Commonwealth Universities and Association of African Universities (AAU). CBU is renowned for training graduates with Bachelor's degrees, although Master's programs are also common. It consists of seven schools: Built Environment (architecture and urban planning), Business, Engineering, Mathematics and Natural Sciences, Mines and Mineral Sciences, Natural Resources and graduate studies. CBU also has a directorate of distance education and open learning. Tuition does not include room and board. The university follows a trimester system (CBU, 2011). Mulungushi University (MU) is one of Zambia's three newest public universities. Established on 1 January 2008, MU is a multi-level curriculum university offering a wide range of degree, diploma and certificate programs in its nine academic faculties. By 2011 the university had a student population of about 2, 000 (MU Handbook, 2012). The University also offers distance and lifelong learning programs, short courses and evening classes for students who are unable to study full-time. It is the only public University that charges full economic fees at market rates (MU Handbook, 2012). Though few; the University has managed to attract foreign students and staff. MU is the only public university at which students do not receive government support. Copperbelt and Nkrumah Universities of Education are the latest additions to Zambia's public universities. Clearly, it is rather difficult to classify the two newly upgraded institutions as fully fledged public universities as they are still experiencing shock following the transformation for which they were ill-prepared (Cheyeka, Masaiti & Mulenga, 2010). To

some extent both still operate under an affiliate college model status while restructuring is still on-going; however, by law and gazette they are now recognised as public universities (MOE, 2010c). Cheyeka, Masaiti and Mulenga (2010), state that in 2005 the Ministry of Education engaged the Commonwealth of Learning (CoL) to review the performance of teacher education programs in Zambia. According to the findings of CoL, teacher education was not linked to school curriculum and the programs were not linked to school needs. There was, according to CoL's findings, underutilization and over utilization of teachers in some subjects. One recommendation made by CoL was that Nkrumah College of Education and Copperbelt Secondary Teachers College (COTSECO) be transformed into university colleges. The recommendation was based on the findings that high schools did not have degree holders as teachers and generally there was a yawning gap between demand and supply of teachers in basic (1-7), upper basic (8-9) and high (10-12) schools (Cheyeka, Masaiti & Mulenga , 2010). Zambia higher education sector especially public university is faced with a multitude of problems and challenges, ranging from access and affordability, quality and relevance of programs, participation and enrollment, finance, deteriorating of physical facilities and retention of faculty and staff among others. Some selected challenges in Zambia's public universities are herewith discussed below. Infrastructural Development: The reality of the situation in Zambia's public universities is that facilities have remained unexpanded since most of these institutions were established decades ago. For instance, the University of Zambia was established in 1966 to fewer than 4, 000 students and is now admitting over 15000 students to

study in different disciplines. Student accommodation continues to face the most pressure. Room arrangement in the student halls of residence that were initially designed to accommodate two people are now made to accommodate more students. Lecture halls are overstretched across all public universities (Masaiti, 2012a). A lecture theatre that has a capacity of about 100 hundred students is now taking over 200 hundred and above. Overcrowding, sitting and standing outside lecture theatres during lectures are marked results of complete dilapidation of academic buildings in universities in Zambia. What makes the already complicated situation more precarious is while facilities remain unexpanded the limited ones are overstretched and over utilized with less or without any effort to do real maintenance. The Consequences are many but one visible one is that of universities drastically cutting off enrollment of qualified students limiting access to higher by facilities (Masaiti, 2012)Atuahene (2006) observes that higher education expansion, especially increasing enrollment and opening access cannot be achieved without concurrent improvement in infrastructural facilities, particularly residential facilities to accommodate the ever increasing number of students. He further contends that in order to achieve the objective of expanding access most African universities need to improve academic facilities, renovate offices to accommodate faculty and staff, support institutions with office equipments such as computers, photocopiers, and printers to facilitate smooth running of administration and learning and teaching materials (Ibid, 2006). Also, clearly most lecture rooms need equipment such as projectors, LCD screens, and audio visual devices to accelerate effective teaching and learning. It is also true that while university

students in the United States, the United Kingdom, Germany, Japan and China to name a few enjoy long hours of internet accessibility in their institutions, no university in Zambia has such comparable facilities (Shafika, 2007). It is common to find students in Zambia still using library index card for searching for articles, journal papers and textbook (Shafika, 2007). This is a serious threat to education development and especially developing an efficient academic system. Research and Publication: Universities in Zambia are expected play a huge role in knowledge creation and dissemination through research but it appears there is inadequate investment in research and development (Simukanga, 2009). For higher education to thrive and gain its lost image in the continent of Africa there is the need for universities to transcend the boundaries of learning and teaching to include into the curriculum research components (World Bank, 2005). Zambia like most of Africa, there is a weak relationship between universities and industry. Closely related to the lack of investment into educational research is the absence of commitment by faculty or lecturers to embark on intensive research into higher education. In the western world and China, there is the surge for collaborative research among faculty members (Atuahene, 2006).

Department members come together to write research proposals for funds into specific project and research. This phenomenon is quite lacking in universities in Zambia though efforts are being made to do collaborative research within department at relatively small scale. It is common for professors in Zambia to be involved in non academic activities and sometimes become adjunct professors at other universities too. It is very common that both professors and senior lecturers in Zambia do not have

time to get involved in proper research, less still write books, text and articles that improves and enriches their knowledge base and generally to mentor junior faculty. They are familiar with the old recycled modes of instructions and material (World Bank, 2010). This eventually affects the quality of graduates since rote learning approach coupled with classical approach of teaching as inherited from or bequeathed to the continent by the colonial education system always reign high in the academe. Innovation and creativity is not encouraged, let alone research into societal problems (World Bank, 2010). Faculty Recruitment and Retention: After a decade of comparative economic success following independence, it was soon discovered that as the economy went through a period of difficulties, all sectors suffered (Kelly, 1991). This led to a serious problem of staff attrition, especially at the higher education level. The university, like other sectors, suffered and continues to suffer from what has come to be called "brain drain". Zambia offers comparatively low university salaries, especially when compared to other countries in the SADC region. University faculty and teachers have better remuneration in Botswana, South Africa and Namibia. These economic factors and the less-than-motivating working environment contributed to loss of personnel, which can be seen as a consequence of Zambia's economic problems (Carmody, 2004). This picture is made clear by the Ministry of Education report of 1996, which states: Faculty retention and recruitment have always been a major challenge to universities and colleges. The majority of professors, instructors and lecturers are past retirement age; however, the issue of brain drain remains the hallmark of the collapse of most academic departments and programs. Staff sent abroad for further

education refuse to return to their home country when they finish their studies because of poor employment conditions. In other words, intellectual flight is rampant in public universities in Zambia. Accessibility and Affordability: Increasingly insufficient capacity for the number of students deemed qualified for, and desiring, a university education is yet another big challenge. Zambia has a relatively low percent of its college age cohort going on to higher education, compared to SADC averages of 6-8 percent. Mwanza (2008) blames this on lack of clear higher education policies, pressure on university infrastructure and low levels of investment. Another serious indicator of the capacity problem is the number of students deemed qualified for university admittance by virtue of passing scores on the General Certificate Education examination. At present, only six percent of Zambians access higher education (universities and colleges) after completing school in a country with a population of slightly above 13 million and where 300,000 pupils complete secondary education every year (Nkanza, 2010). Nkanza notes that as a result of limited space there has been mushrooming of bogus training institutions; some students have already fallen victim to fake foreign qualifications providers. Affordability is also a real issue. The government only supports students in two public universities; at all other institutions students are expected to pay the full fees. Civil Society for Poverty Reduction (CSPR) observes that poverty levels are still very high and estimates that 34 percent of people in urban areas and about 80 percent of people in rural areas still live under the poverty line (Nshidano, 2010). In a country where there is no fully developed loan system for students, this implies that a good number cannot access higher education due to

affordability. Low Revenue: Public universities receive low levels of revenue from the government and generate relatively little additional funds through cost sharing, revenue diversification and other means. In Zambia, philanthropy, trust funds and external donation is not very common in university education (Simukanga, 2009). This problem is further compounded by the failure of the government to provide funds to cover the true total enrolment or the true underlying per student costs per program. Universities are also characterized with huge debt and budget deficits, closures as a result of students or lecturers strike demanding for improved conditions of services. Problems related to financial austerity is the order of the day (World Bank, 2010). Clearly, public universities' revenue levels are too low for effective and efficient operation. It is necessary to carefully re-think how all these challenges can be resolved, or at least time for all interested stakeholders to start paying serious attention to the problem. This study appraises the current policy of financing public universities in Zambia. The question worthy posing is: What factors influence the financing policy in higher education in general. Universities throughout the world always operate in a unique country's specific political and economic context (Johnstone & Marcucci, 2007). It is also important to remember that the historic context and the ever increasing globalization play a part too. So any policy reform concerning financial austerity or problems and any possible solution are conceived in this larger context (Ibid, 2007). Healey & DeStephano (1997) identifies factors which are considered crucial policy consideration of higher education finance. The factors are also key in decisions related to university financing also in Zambia. These include:

Economic condition of the country, Higher education bureaucratic structures, Laws and regulations, Historical contexts, Donors, Trend & momentum (Autonomy and Student voice), Increasing demand, Competition and Politics (Ibid, 1997). As Zambia is increasingly trying to embrace a free-market economy along with its values and systems, conflicts are inevitable. Kelly (1996) shows some of the confusion developing countries find themselves, Zambia just like any other developing nation has been inundated with ideas from outside the country especially England and the US. Before the country followed socialist ideologies especially in the first and second republic and the third republic introduced the free-market. Financing reforms in Zambia's higher education has been mainly due to four crucial factors highlighted: Politics; Economic condition, Donors and Bureaucratic system. Douglas, (2005) explains the high correlation which exists between political and economic stability and on the other hand the nation's ability to build and support quality tertiary education institutions. Zambia has had a stable government since its independence from Britain. Zambia attained her political independence from Britain in 1964. After independence, the decade which followed (1964 to 1974) is still considered by many scholars as a period of relative success in development of the country's infrastructure, and also social-economic gains (Kelly, 1991; Carmody, 2004). Zambia realized formal education up to university level in this same period. In the first and second republic the government formulated policies aimed at developing its much needed human resource for economic development. Most of higher education was financed by the state through tax funding. With the advent of multiparty democracy in 1991, we see the introduction of cost sharing

initiatives. This was mostly because Zambia's economic achievement plummeted with the world decline in the price of copper, Zambia's main export (Still main foreign exchange earner even today). Though politically Zambia has been stable, its education system especially higher education does not really reflect this reality. Currently, there has been enormous growth in both public and private higher education. Despite its strong economic growth in recent times (Last 10 years: 2000-2012) Zambia is still regarded as a poor and developing nation using a world comparative indicator. In 2011, Zambia had a Human Development Index of between 0.450-0.499 which ranked 151 out of 187 countries (UNDP, 2011). Factors that contribute to this low score include high poverty levels (still have many people still living on less than a dollar a day). Though in July 2011, Zambia together with Ghana were reclassified as 'lower middle income' countries from the status of 'Least Developed Countries' by the world Bank, the picture in education does not seem to be in commensurate with this declaration (Masaiti, 2012). According to Zambia Economist (2010), without doubt the biggest challenge to education especially at higher education level is funding. Zambia's public spending on education as a share of GDP has declined from 5 percent to 4.7 percent per annum between 1965 and 1986 to an average of 2.3 percent of GDP between 1987 and 2000 and has slightly improved to 3.8 by 2010 (Musokotwane, 2009). In contrast, middle income Botswana (5.4 percent), Malaysia (5.8 percent), and South Africa (5.4 percent) were devoting more than twice as large a share of their GDP between 1965 and 1986, and their share of public spending on education was even larger during 1985-2000, with Botswana spending an average of 7.

4 percent and Malaysia and South Africa about 6 percent of their GDP per annum (World Development Indicator: 2003). Even the percentage of the budget that goes to education (between 15 to 19%) is less than the regional average of above 20% (Musokotwane, 2009). Most of the countries in SADC initially after becoming independent came to Zambia to learn how it had managed education system and outcome. The question worthy posing is: Why has Zambian education system not progressed fast enough to meet the demands of its growing population? Zambia has been a haven of peace, no major wars or ethnic violence like other African countries and has always had stable government with smooth transitions. Zambia's population stands at about 13.2 million (United Nations, 2010) with GNI per capita of US \$1,070 (World Bank, 2010). The economy in the last 5 years has been growing at an average of 5-6% per annum and generally there have been improved copper prices and investments in mining with improved prospects for export earnings. Zambia's economic story is one of mixed grill, but one can argue that all indicators now are now positive. The nature and strength of the economy is a key consideration when crafting the higher education financing policy. This will determine the amount of subsidies that will go along with this policy. What kind of cost sharing arrangements should be instituted, bursaries, student loans, autonomy to institutions among other important considerations. Donors and Bureaucratic Structures are other considerations in policy reforms. After an economic decline in the late 70s and 80s, Zambia changed its one party state and its humanistic ideology of humanism. After, 1991 Zambia through the help of the World Bank and other cooperating partners started privatizing most of the state enterprise and introduced

market ideologies. During this period Zambia became heavily dependent on the donors to meet its annual budget (GRZ, 2005). Donors dictated Zambia's development agenda since their support came with a lot of conditionality's. In other words, macro level goals were established by international agencies, and most ministries relied heavily on technical support from outside. After meeting the HPIC point, Zambia became less dependent on external support, is currently almost moving to point a point where it funds its own total budget, though donors is still common in targeted sectors. Donors also have helped Zambia in developing different policies for different ministries including higher education. Until then donor footprints have remained in Zambia government. Just like in other developing economies, donor policy continues to shape developmental agendas; moreover, most of the donor aid has come with conditionality's. Zambia has made a series of attempt to restructure its education system through a series of different policies. The government bureaucratic in the ministry of education and line ministries has been actively involved in the implementation of higher education policy in consultation with university faculty. The most important Education policy documents that have shaped both education and in the context of ' financing higher education since Zambia's independence have been mostly implemented using ministry of education and line ministries bureaucratic structures.

3. 3 Financing of Public Universities

I first discuss the financing of public universities in the context of the overall education budget. All public universities apart from Mulungushi rely heavily on government financing with only about below 20% coming from cost

sharing and revenue diversification. Most bilateral and multilateral donors give supplement financial assistance to the ministry of education which in turn allocates to different sectors within the larger spectrum of the education ministry. Clearly, public universities are highly dependent on activities and budget allocation for the ministry of education. After the creation of the first public university in 1966, the responsibility for financing the institution fell to the government. The University was well financed from 1966 to 1974 while the economy was doing relatively well and had massive revenues from the mining industries. The real problem in financing public university started when the economic fortunes plummeted. Kelly (1991) gives an overview of GDP allocation to education especially during the times when Zambia's economy was in decline. Observed that over the entire period 1970-85 the education sector had accounted for an average of 5.1 per cent of the GDP, the share being higher during the first half of the period (5.6 per cent across 1970-77) than during the second half (an average of 4.9 per cent across 1978-85) (Kelly, 1991). Then, this share rose in the early years of the period to reach a peak of 6.2 per cent in 1975 and 1976, but thereafter it fell, largely, because of the low level of educational investment after 1976 (Kelly, 1991). Education's contribution to the GDP rose considerably in 1982, but the improvement was not maintained. Instead, a steady and rapid decline had been experienced, with the 1985 share of 4.6 per cent being down more than 1.5 percentage points from the all-time highs of 1975 and 1976 (Kelly, 1991). Even worse deterioration was experienced in 1986 when the share fell to below 3.4 per cent, the lowest value ever experienced in independent Zambian nation. The decrease that occurred in the share of the GDP

attributable to the education sector took place during the years of severe economic difficulty and it is apparent that there is a relationship between the years of greatest difficulty, such as 1978, 1979, 1980, 1985 and 1986, and the proportion of the GDP contributed by education. This decline had also a huge impact on tertiary education which started experiencing multifaceted challenges. Zambia's economic fortunes plummeted with the world decline in the price of copper, Zambia's main export. During the decline there was negligible GDP growth, high rates of joblessness and the increasingly inability of the state to finance basic health, sanitation and education services to its citizens (Gillies, 2010). In the context of education commentators, they called the provision as 'education in the declining economy'. In 1991, Zambia reverted to multiparty system of government. The state of Zambia's education sector in 1991 was influenced by the copper crisis, Zambia's subsequent economic decline, the deterioration of government institutions and services, and the increasing demand for education (Gillies, 2010). With the help of the World Bank and IMF, Zambia started implementing reforms on the basis of liberalization and Structure Adjustment Program (SAP). Though restructuring breathed some life in different sectors of the economy, many have argued that the restructuring made the conditions for Zambia worse off (Levidow, 2001). After 1990, Zambia became heavily dependent on donor support. Embroiled in debt, in early 2000s, Zambia's economy began to grow and Zambia reached HIPC (Highly Indebted Poor Country) Completion Point - releasing it from 15 years of the restrictions and 'conditionalities' of Structural Adjustment Programme (SAP), and the majority of its external debt was written off by its creditors.

After this relief the education system relatively became better though major challenges still remained the hallmark of education especially universities system (Gillies, 2010). After HPIC, there was special attention to middle basic and high school education, although 56% of the resources for implementing the plan were spent on basic education (Wood, 2005). By 2004, public universities were only allocated 4% of total education budget. Both the government and the donors had increased their financial commitments to education in 2004. The total budget (including salaries and allowances) amounted to US\$255. 5 million (K1. 175 billion), comprising US\$165 million (K756. 6 million) from the government and US\$91 million (K418. 7 million) from donors. As a percentage of the national budget and of GDP, total resources to the education sector increased from 13. 2% to 15. 5% and 14. 3% to 15. 9% respectively from 2003 to 2004 (Wood, 2005). Woods gives a further elaboration that a proportion of the discretionary budget, government expenditure in the education sector rose from an average of 18% between 1999 and 2003 to 21% in 2004 and by 2005, it was high at 24%. The Zambian civil society and donors alike appreciated this as a positive sign of commitment by the government to improving education. The implication was that additional government spending was used to employ 5000 of the 9000 unemployed teachers who graduated in 2002 and 2003. The total budget for salaries had increased to US\$134. 3 million (K617. 7 million) in 2005 up from US\$123. 8 million (K569. 7 million) in 2004. Salaries accounted for about 70% of the government's education expenditure and other recurrent expenditures and grants consumed the remainder (Wood, 2004). Despite an increase in its resources devoted to education between

year 1999 to 2005 the government remained heavily reliant on overseas development assistance (ODA), which accounted for 36% of the education budget (MOE, 2006). In 2005, the total percentage allocation to public universities increased from 4.4% in 2004 to 6%. The education sector had 5 large donors: the Norwegian, Dutch, Irish, British governments and the European Commission (EC) (Wood, 2005). By 2005, there were 11 bilateral donors, 3 multilateral donors and 1 UN agency. Most donors, including four of the G7 donors (the UK, the US, Japan, and Canada), provide their ODA within the sector wide approach (SWAP) to support the MOE's Strategic Plan for Education, and most committed their support over the medium term (3-5 years) (GRZ, 2004). Other Donors included the Norwegians, Dutch, Irish, British, Danish, and Finnish among others. The total budget requirement for the ministry of Education in 2007 stood at ZMK1, 922, 247, 728. 00 (US\$ 417. 9 million). In 2006, the public universities were given 6. 1% of the total education budget. This rose considerably high in 2007 to 12%. The ministry of education premised this on meeting the Fifth National Development Plan (FNDP) which combined both domestic and external resources (MOE, 2007). Included among the sub-sector resources, was an allocation for tertiary which amounted to ZMK300, 332, 802 (US\$ 65. 3 million) (National Annual Work Plan & Budgets, 2007). In 2008, public universities were allocated 12. 1 % of the total ministry of education budget. The allocation reduced to 10. 3% in 2009. Examining closely the allocations by ministry of in 2009, we see an upward adjustment compared to previous years. In terms of proportionate allocation across programs, slightly below two-third of the total 2009 Ministry of Education budget went to personal emoluments. The total Ministry of

Education budget for 2009 was approximately 617 million US Dollar. The budget allocation was as follows: 58% for personal emoluments, 19% to infrastructure, 6% to management and administration, 2% to curriculum and education materials, 1% to teacher education, 0.11% to distance education, 0.25% standards and evaluation and 10% public universities and research as shown in Figure 3.6 (MOE, 2009). We see that the allocation to public University and research was 10% of the total budget expenditure in 2009 and this declined to 9.6% in 2010. One salient feature of education budgets in concurrent years was that, the biggest portion of the budget accounted for personal emoluments and this allocation has been steadily increasing over the years. The funds allocated to public universities have been significantly declining in real terms (MOE Strategic Plan, 2010). In 2010, the total MOE budget stood at K3,250 billion (about USD 900 Million) of which K2,922 billion was from Government while K328 million was from the Cooperating Partners (CPs) (MOE, 2011). This showed an increase of 51% on the Ministry's total budget allocation in contrast to the 2009 budget which stood at K2,776 billion. In the period, the Government of the Republic of Zambia (GRZ) resource allocation to the ministry had shown an upward trend from K1,878 million in 2008 to K2,922 million in 2009 (Annual Work plan and Budget, MOE, 2011). In 2011, the budget marked the first year of the implementation of the Sixth National Development Plan (SNDP) which places strategic focus on infrastructure and human development. The 2011 budget aligned resources towards these strategic areas, by committing more resources towards programmes and projects that carry high economic and social returns. The expenditures on economic affairs, health and education

had been increased, and accounted for over half of the total budget for the Government (Annual Work plan and Budget, MOE, 2011). In 2011 though the percentage to public universities had decline when compared to the overall budget, K3, 571 billion (US\$ 1, 080 million) had been allocated to the education sector as compared to K2. 922 billion in 2010. This represented 18. 6 percent of the total national budget as compared to 19. 9 percent in 2010. This showed a decrease of 1. 3 percent from 2010. The Non Personal Emolument component had increased from K 829 million to K 981 million in 2011. This signified an increment of K152 million for the non personal emolument activities (Annual Work plan and Budget, MOE, 2011). Out of this K 444. 2 million had been allocated for construction of 31 basic schools and 37 high schools throughout the country and a further K36. 5 million had been allocated for construction and rehabilitation of training institutes and research centers (Annual Work plan and Budget, MOE, 2011). The total pledges from the cooperating partners amounted to K220. 4 million which also represented 5. 81 percent of the total pledges to the Ministry for activities in 2011. As shown in Table 3. 2, the percentage of university financing has remained proportionally low when compared to the overall education financing. The University of Zambia (UNZA) was the first public university to be created in 1966. The responsibility for financing the institution fell to the government. Kelly (1991) observes that the most striking feature in university financing from 1975 to 1985 is the sustained support in real terms during the years of shrinking national resources (see Table 3. 3). Indeed, support to the university increased substantially: the government grant from 1982 to 1985 was almost 50 percent higher than

from 1977 to 1980. However, as the report points out, this increase did not take increased enrolment into account: the expenditure per student, at constant prices, was 10 percent higher in 1984 than it had been in 1977. Kelly (1991) reports that " the university's income from all sources had grown in real terms since 1977 at an annual average rate of 4. 7 percent, but the number of full-time students grew at a rate of no more than 2. 5 percent." The report further indicates that the government provided funds to the university in two ways: as a grant for running costs and in the form of student bursaries. The annual grant had remained stable at about 77 percent of the university's income until 1979, but between 1979 and 1984, bursary payments increased from 13 to 15 percent of the university income. Hence, over 90 percent of the university's income originated directly from public funds, and this proportion kept increasing. The balance of the income came from fees, non-government sources, interest on investments, rents on property and from the university farm (Kelly, 1991). Carmody (2004) confirms the trend and shows that since the early 1980s the education sector suffered from insufficient and declining levels of funding. Massive reduction occurred in real public expenditure on the system between 1982 and 1991, at a time when enrolments at all levels continued to grow. From 1987 to 1991, real expenditure on the sector fell to less than half of what it had been from 1981 to 1985. Carmody further observes that the decline of public investment in education was due to diminishing public resources at a time when the system was expanding. Because of this situation, Carmody clearly correlates the emergency of cost sharing with the introduction of boarding fees towards the late 1980s and into the 1990s. Public universities

in Zambia, as elsewhere in Africa, suffered major setbacks at the onset of the decline in the economy. In the case of Zambia, qualified lecturers started seeking posts at other universities or joining international organisations, leaving behind inexperienced staff. Carmody (2004) observes that between 1984 and 1994 alone, " about 230 academic staff left the University of Zambia and this drift has continued mainly due to poor salaries and unsatisfactory condition of service." Carmody further remarks that 88 percent of funding between 2000 and 2002 came from the government, which raises important questions on academic freedom and autonomy. The Bwalya Commission of 1997 observed that many closures were made at the public universities because of widespread financial and other types of mismanagement at the highest levels (Carmody, 2004). The 1996 educational document " Educating our Future" is still the policy document guiding financing higher education. It is the first clear document that saliently discusses cost sharing, especially at tertiary level (MOE, 1996). This policy has guided the provision of university education for about 15 years. The Ministry of Education has now constituted a team to review this important document to put it in line with the " Vision 2030", in which the country aspires to attain a prosperous middle-income economy with vibrant universities (MOE, 2012). Currently, students are required to pay fees for tuition, board and accommodation at almost all higher education institutions in Zambia. In many institutions, the fees are nominal, with the burden of support falling to the government either through grants or subventions (MOE, 1996; MOE, 2010c). At the universities, the fees are more substantial, although they are still not sufficient to meet the costs. The majority of

students at public universities, about 80 percent, are sponsored by the government, which pays full accommodation and up to 90 percent of tuition fees and gives each student a living allowance to cover food and personal educational items (MOE, 2010c). In addition, there are allowances for research courses and vocational training. The remaining university students, about 20 percent, are sponsored by other public or private bodies or are self-sponsored (MOE, 2010c; 2009a). In trying to assess whether the 1996 policy of financing universities has been ideal, the study now highlight the current trend. Zambia public universities are still heavily dependent on the government despite efforts to introduce a true cost sharing model. The following is an examination of trends in higher education financing from 2009 to 2012. Currently, the two big public universities have huge debts and financing gaps, which increase each year. The University of Zambia is running a huge debt related to Statutory Contributions and Personnel Emolument related as showThe total financial gap (captured as debt by the medium term expenditure report) of the University of Zambia is noted in the 2010-2012 Medium Term Expenditure document (MOE, 2010a). University of Zambia had a total debt of US\$ 76, 144, 927. 25 as of April 2009. This amount was broken down into two major components, namely Statutory Contributions at US\$ 36, 465, 898. 59 and Personnel Emolument related (Terminal) at US\$ 39, 683, 028. 67. The current granted amount is by far less in liquidating the current debt at the University of Zambia. Moreover, the allocated amount is basically used for daily operation, administration and also personal emoluments. The Copperbelt University (CBU) was founded in 1987, after starting as a satellite university of the University of Zambia. A

new University of Zambia Act that came into operation in 1979 provided a definitive constitution for this federal structure (UNZA, 1990). However, in 1987 the Act was reviewed and it was consequently decided to abolish the federal structure. Two Acts were passed establishing two autonomous public universities, namely the University of Zambia and Copperbelt University (Carmody, 2004). The university opened at a time when Zambia was experiencing huge economic problems. The funding to universities was erratic. Students at inception enjoyed free government support but with the advent of the 1996 cost sharing policy, measures were put in place to encourage both revenue diversification and cost sharing initiatives. Just like at the University of Zambia, Copperbelt University is experiencing a plethora of challenges. The problem of the ever growing debt has remained at the peril of CBU as shown in Figure 3. 9. As noted in noted in the 2010-2012 Medium Term Expenditure document (MOE, 2010a), Copperbelt University had a total financing gap (debt) of US\$ 30, 978, 361. 76 as of June 2009. This amount was broken down into two major components, namely Statutory Contributions at US\$ 29, 549, 827. 49 and Personnel Emolument related (Terminal) at US\$ 1, 419, 534. 28. The level of debt indicates how serious the financial weakness of institutions in Zambia is. Both Figure 3. 8 and 3. 9 has shown the discrepancy over four fiscal years between the amount requested by public universities and the amount given by the government in form of grants. Deliberate effort has also been made to show the level of debt. From government estimates of expenditures and budgets released to public institutions, it is clear that the funding level remained almost the same for three years, from 2009 to 2011, despite the inflation and the depreciation of

the local currency. The requirements for public institutions are usually higher than what is estimated based on the expected revenue the government will generate in the given fiscal year. The issue is that government estimates are far below the level needed for sustainable operations and for better remuneration of faculty. What makes Zambia's situation more precarious is the deterioration and devaluation of its currency in relation to other major currencies such as the Euro, the Pound sterling and the US dollar. For example, as of January 2010 one US dollar was equivalent to more than, four thousand Zambian Kwacha; currently one dollar is slightly over five thousand Kwacha. There are also problems caused by an increase in enrolment figures. Figures 3. 8 and 3. 9 show clearly that the two big public universities have been granted only slightly more than 20 percent of the total amount requested for the last four consecutive years. For instance, the University of Zambia received 20 percent of the requested funds in 2009, 21 percent in 2010, 21. 3 percent in 2011 and 27 percent in 2012. The picture is no different for the other public universities. The level of debt as a result of accumulation of goods and services in the two big public universities ranges from US\$ 30 million to US\$ 80 million. Over the last four years, the government has only been committing about 1 to 13 percent toward liquidating this huge debt burden. Mulungushi University is the only public university which is seemingly effective, viable and sustainable is Zambia's newest public university which opened in 2008, operates on the ' unit cost tuition model' even though government supports it only for capital projects. It is autonomous in decision making and operates like a business. All services provided by the institutions are provided for at cost and are borne by the

consumer. All students enrolled pay economic fees in this university. This is the only public university which has been relatively successful though it is operating on the trial model. Currently it funds over 70% of its recurrent budget expenditure. The only challenge is that the initial commitment by government to keep funding the capital projects has been dwindling. The government has not lived up to the initial agreement; it has not honored the requested amount for infrastructure development as shown in Figure 3. 10. As a result the university has been experiencing a financial gap.

3. 4 Financing of University Education in China: Possible Lessons

In People's Republic of China, the financing structure for higher education is dominated by government subsidies, but additional funding comes from civil society and tuition fees (Ministry of Education, 2000). Sun & Barrientos (2009) observe that government subsidies have declined as a share of total financing from 64. 6% in 1990 to 53. 1% in 1998. Conversely, the share of financing contributed by tuition and fee had risen rapidly since 1990, especially after 1997. Contributions from other sources especially civil society and enterprises initially had increased but later on decreased to the 1990 levels. In line with many developing countries, public subsidies to education in China are many times larger for higher education students than for students in primary and secondary education. As observed by OECD (2003), financing policy in china's public universities and colleges is through four broad income streams (each of which has several components): A per capita payment made to the institution by the central or provincial government, against an agreed quota of students. Additional government

funds provided (mainly) to the top universities, under the " 985" and " 211" project schemes. These are non-recurrent project grants, usually available primarily for capital projects. Tuition fees that are fixed by provincial governments on the basis of educational costs and " affordability". These fees are currently set at about 25% of actual cost levels (" cost levels" are determined by an algorithm developed by the MOE). Additional income that universities and colleges are able to raise through supplementary teaching, research and other activities. (OECD, 2003, p. 38)For now, it appears all public institutions receive the per-capita grants. The identified top research-oriented universities receive significant amount of resources from the " 985" and " 211" projects and often generate significant levels of additional revenue. While others more instructionally-oriented universities and colleges relies almost entirely on tuition to supplement their per-capita allocations. Increasingly both the top research universities and less elite institution are engaging in a variety of entrepreneurial activities to complement their government and student sources of income. As for the private Chinese universities, they are financed from a combination of tuition and entrepreneurial earnings (OECD, 2003). There is really need for Chinese universities to explore alternative source of revenues especially from the beneficiaries, thus both graduate in employment and employers should pay their fair share. However, despite all the effort to diversify, the Chinese government remains a major source of funding, because it: Has a direct interest in ensuring that China's higher education participation matches that of its national economic competitors. Needs to ensure that the workforce of the future is equipped with the range of skills and attributes required to

undertake the country's essential roles. Has a responsibility to ensure that - for all citizens - access to opportunities to benefit from higher education is socially just. Needs to secure the economic and cultural benefits that higher education can offer the whole country. (OECD, 2003 p. 39) For these reasons, it is essential that the Chinese government over the long term ensures that spending on higher education (public and private) increases at least proportionally with the growth of Gross Domestic Product. Though a lot of progress has been made in the last three decades, the financing of education is still a big challenge when it comes especially to allocation and access. Sun and Barrientos, (2009) postulates, that the current levels of education spending in China are insufficient to meet the demand arising from rapid economic growth. Consolidated government expenditure in the field of education reached only 2.79% of GDP in 1999, 2.79 in 2004 then rising marginally to 2.82% in 2005 as shown in Table 3.5 (Mok and Lo, 2007). This is clearly and significantly lower than the developing country average at 4.1% of GDP, and lower than the developed country average at 5.3% of GDP in the mid-1990s as indicated by World Bank data (World Bank, 1997). China education allocation is very interesting as expenditure is skewed towards higher education. The country spends almost a quarter of its education budget on tertiary education in 1998-1999 (UNESCO Institute for Statistics, 2004a). This is also an area (higher education) where participation rates remain low to only about 21% (though far above Zambia) of the relevant population group in 2005 (Zhou, 2006). The decentralization (from central government to provinces) of education finance has increased inequalities in access across regions, especially as the poor regions have

reduced capacity to finance education at all levels (Sun & Barrientos, 2009). Increases in both tuition and fees make matters worse and more complicated. The so called 'marketization' of higher education since the 1980s, especially after the early 1990s, has led to a one-third rise in higher education tuition fees across the board (Sun & Barrientos, 2009). Borrowing by public universities in China is currently at 28.17 billion US\$ by 2007, a dangerous level for some universities as noted by (CASS, 2007). Financing of higher education in China has gone through different phases. The onset of marketization, decentralization and privatization since the 1980 and early 1990s, have led to reforms in higher education, which have in turn reinforced the role of private financing. The status of universities in China has continuously been changing. For instance, in 1956 all higher education institutions were publicly funded in China (Zha, 2001). In March 1982, China had its first private university. In December 1982, the renewed Constitution of China encouraged stakeholders' especially economic organizations, governmental enterprise, social groups to initiate various forms of educational activities (Zha, 2001). Yuan (2003) acknowledges that in 1993, and for the first time, a national policy was set aimed to provide 'active encouragement, strong support, proper guidelines and sound management' for non-state sectors to run education including higher education. Consequently, in 1995, the new Education Law confirmed this policy change (State Education Commission, 1995, cited in Zha, 2001). The number of private legal education systems has been growing at exponential levels since then. What available options were put in place for financing this huge expansion of access to higher education in China? A scholarship

scheme was established for all undergraduate candidates in 1986–1987, later extended to postgraduate candidates in 1991. At present, these reach only a small number of students. Around 20–30% of students in public universities get financial aid in China, and the level of support is too low. The loans system in higher education in China was piloted in 1996 and fully implemented in 1999 (China Education and Research Net, 2001). In China, there are a number of financial aids given to students in tertiary education (private and public): These among others include: grants, scholarships, work study and student loan (Shen and Li, 2003). The loan system also falls under two categories the old and new system. The new system started operating in 2000 after its introduction in 1999 (Shen and Li, 2003). Since then, the Chinese government kept on making changes to this policy in subsequent years to make the loan system better and workable. What though is clear for China is that means-tested Government Supported Student Loan (GSSL) is available to cover both tuition and living expenses. Loans are disbursed by state owned commercial banks up to a maximum in 2001 of RMB 8, 000 per year (Shen and Li, 2003). Interest rates are pegged to the rates used in commercial loans within the same repayment period. Interest is charged from the origination of the loan, with almost half paid by the government. Usually, unless in exceptional cases monthly or quarterly repayments begin 6 months after completion of studies with a maximum repayment period of 4 years after graduating (Shen, 2003; Johnstone, 2009)The financing of higher education in China in premised on cost sharing, revenue diversification and student loan scheme. Suffice though to mention that the government is still a big player especially when it comes to project ' 985' and

' 211' project universities. Hays (2012, p. 1) elucidates, " In the 1990s, the Chinese government began pouring a lot of money into Chinese universities in an effort to bring them up to world class status and create enough openings for a boom in university age students. Schools were merged, new facilities and dormitories were built. These days land is still being cleared to make way for new school facilities". China now has more than 1, 900 institutions of higher learning, nearly double the number in 2000. Close to 19 million students are enrolled, a six fold jump in one decade. The number of faculty has more than quadrupled (Hays, 2012). The number of students enrolled in Chinese universities increased twentyfold in the last 30 years: between roughly 30, 000 in 1978, when universities opened again after the learning-free zone of the Cultural Revolution, and 600, 000 in 2009. Between the years 2000 and 2009, higher-education enrollment in China more than tripled (Hays, 2012). Today, China awards more college degrees than the United States and India combined. Annual awards of doctoral degrees rose sevenfold between 1996 and 2006. Since China began opening up in the 1980s a number of private, profit-making universities have opened up. Most of the students are young people who failed to get into established universities. The universities often charge high fees and deliver a education of dubious quality (Hays, 2012). All in all, Zambia can learn a lot from financing policy of higher education in China. Despite, its population of close to 1. 4 billion people, it has a system of higher education which is relatively effective. The enrollment figures as shown in the preceding paragraph keep swelling, the funding from government is ever increasing to meet the demand, and infrastructure is constantly being constructed and upgraded.

China has also a number scheme of assisting needy student or those who cannot afford. There is now a deliberate effort focusing on children of immigrant workers and farmers so that they are given opportunity to access higher education. The growth of Chinese economy especially in the last three decades has had a direct trickledown effect of improved finance to the higher education sector.