JHEA/RESA Vol. 11, Nos 1&2, 2013, pp. 19–51

(ISSN 0851–7762)

Funding Higher Education in Africa: State, Trends and Perspectives

Damtew Teferra*

Abstract

This article discusses and analyzes the state of funding higher education in Sub-Saharan Africa (SSA). The article, based on nine case study countries, examines the cost of higher education, current and potential funding sources and policy discourses that shaped funding trends in the region. The study further explores policies, trends and factors that hindered, as well as promoted, funding the sector in SSA and the role of external players in doing so. It also articulates poorly tapped and potential sources of funding for the higher education system. It concludes by providing some policy recommendations, taking into account the mounting challenges of expansion which are pushing the cost of higher education to unsustainable levels.

Résumé

Cet article discute et analyse la situation du financement de l'enseignement supérieur en Afrique subsaharienne (ASS). L'article, dont le champ s'étend sur neuf pays couverts par l'étude, examine le coût de l'enseignement supérieur, les sources de financement actuels et potentiels et les discours politiques qui ont façonné les tendances en matière de financement dans la région. L'étude explore plus en détails les politiques, les tendances et les facteurs qui ont entravé et favorisé le financement du secteur en Afrique subsaharienne et la contribution des acteurs externes. Elle énonce également les sources de financement insuffisamment exploitées ou le potentiel de financement qui s'offre au secteur de l'enseignement supérieur. Elle conclut en formulant quelques recommandations de politiques, en tenant compte des défis croissants liés à l'expansion desdits établissements qui contribuent à accroitre le coût de l'enseignement supérieur à des seuils à peine supportables.

* Higher Education Training and Development, University of Kwazulu-Natal, Durban, South Africa. Email: teferra@ukzn.ac.za

Introduction

With increasing national and international commitments and support to education since the Millennium Development Goals Summit and the World Education Forum in 2000, primary education enrolment increased worldwide from 86.7 million in 2000 to 128.6 million in 2008, and gross enrolment rates are now over 100 per cent. Over the same period, enrolment in secondary education increased globally from 22 million to 36.3 million, and enrolment in higher education from 1.8 million to 4.5 million. While the quantitative expansion is impressive, the education system in the SSA region must cope with numerous obstacles. Because of repetition and dropout, many countries are still far from achieving the universal primary education (UPE) goal by 2015. Equally important, the quality of education in the region is recognized as being far below the rest of the world. With increased social pressure for the expansion of post-primary education, governments face a challenge – how to expand educational opportunities, improve quality and increase equity with limited and inadequate financial resources (UNESCO 2011).

Higher education institutions in SSA are the most financially challenged in the world (Teferra 2005a). Academe everywhere, even in wealthy industrialized nations, faces fiscal problems, but the magnitude of these problems is far greater in Africa than anywhere else. According to Teferra and Altbach (2003) the causes include: 1) the pressures of expansion and 'massification' that characterizes most African academic institutions and systems; 2) the economic problems facing most African countries that make it difficult, if not impossible, to provide increased funding for higher education; 3) a changed fiscal climate and policy direction induced by multilateral lending agencies such as the World Bank and the International Monetary Fund; 4) the pressure of other social and health issues such as HIV-AIDS on government budgets; 5)the inability of students to afford the tuition rates needed for fiscal stability; and 6) misallocation of available financial resources, such as the provision of free or highly subsidized accommodation and food for students.

More than any other factors that affected higher education funding in Africa, the policy pursued by major development institutions, notably the World Bank, has been the most prominent. Psacharopoulos (1985), an influential economist at the World Bank, and his colleagues (1994), erroneously concluded that the rate of return on higher education in Africa is lower than the lower education sub-sector. Their studies purported to have proved that returns on investments in education are positive but decrease at the higher level of education; and as such investments in primary education should be emphasized at the expense of higher education. In the face of several subsequent studies that produced results on the contrary – that returns on investments in education increase at the higher level of education (Manda and Bigsten 1998; Liu 1998, in Amin and

Awung 2005), the World Bank view persisted shaping the African higher education policy and its financing landscape for several decades. It was this observation which prompted Leslie (1990) to conclude that over the past 30 years, studies of rates of return on higher education probably have impacted higher education financing policy more than any other information produced by researchers.

Because of a belief that primary and secondary schooling are more important for poverty reduction than tertiary education, the international development community has encouraged African governments' relative neglect of higher education. For example, from 1985 to 1989, 17 per cent of the World Bank's worldwide education-sector spending was on higher education. But from 1995 to 1999, the proportion allotted to higher education declined to just 7 per cent (Bloom, Canning and Chan 2006).

The World Bank study had three immediate impacts on higher education development on the continent as it (a) immediately affected other lending institutions directly, (b) constrained other (bilateral) development partners, and, moreover, (c) prevented individual countries from supporting their own institutions and systems (Teferra 2005b, 2009a).

It was only after the publication of several major policy papers, some by the World Bank itself, that the heavy cloud hanging over the importance of higher education has started to slowly whittle away. In *Constructing Knowledge Societies*, the World Bank (2002:xvii) announced that 'the role of tertiary education in the construction of knowledge economies and democratic societies is more influential than ever. Indeed, tertiary education is central to the creation of the intellectual capacity on which knowledge production and utilization depend and the promotion of the lifelong-learning practices necessary to update individual knowledge and skills'.

In this seminal piece, the Bank first declared that it 'has actively supported tertiary education reform efforts in a number of countries' presumably to water down a prevailing view and added, 'Nevertheless, there is a perception that the Bank has not been fully responsive to the growing demand by clients for tertiary education interventions and that, especially in the poorest countries, lending for the subsector has not matched the importance of tertiary education systems for economic and social development'.

It went on to say that

> The Bank is commonly viewed as supporting only basic education; systematically advocating the reallocation of public expenditures from tertiary to basic education; promoting cost recovery and private sector expansion; and discouraging low-income countries from considering any investment in advanced human capital.

Without any comments towards these outstanding and widely recognized criticisms, it said, 'Given these perceptions, the rapid changes taking place in the global environment, and the persistence of the traditional problems of tertiary education in developing and transition countries, reexamining the World Bank's policies and experiences in tertiary education has become a matter of urgency'.

In *Accelerating Catch Up* (2009), the Bank further affirmed the importance of higher education in econometric terms. It stated, 'Growth in gross domestic product (GDP) in Sub-Saharan Africa (SSA) has accelerated from an average annual rate of 2.0 percent during the 1990s to over 6.0 percent during 2002-07…. if this growth surge is to evolve into a virtuous spiral that stimulates even higher and sustained growth rates in a substantial number of African countries, a significant increase in investment in physical and human capital is needed over an extended period'.

The Bank continued to stress that there was 'urgent need for countries in SSA to acquire the capabilities that will spawn new industries that create more productive jobs, multiple linkages, and a wider range of exports. The desired capabilities derive from investment in physical assets, such as infrastructure and productive facilities, as well as in institutions and human capital. We have stressed human capital…, because in the context of SSA, it is arguably the stepping-stone to a viable and growth-promoting industrial system'.

One may wonder why considerable emphasis is given to the World Bank with regard to funding higher education in Africa in the light of other development players and respective responsible governments. True to the affirmation by the former President of the Bank, James Wolfensohn regarding the importance of knowledge in development in 2003 (World Bank 2003), the power of the 'knowledge bank' has been instrumental in domineering the policy forum unlike any other and hence its impact on the policy development in African higher education.

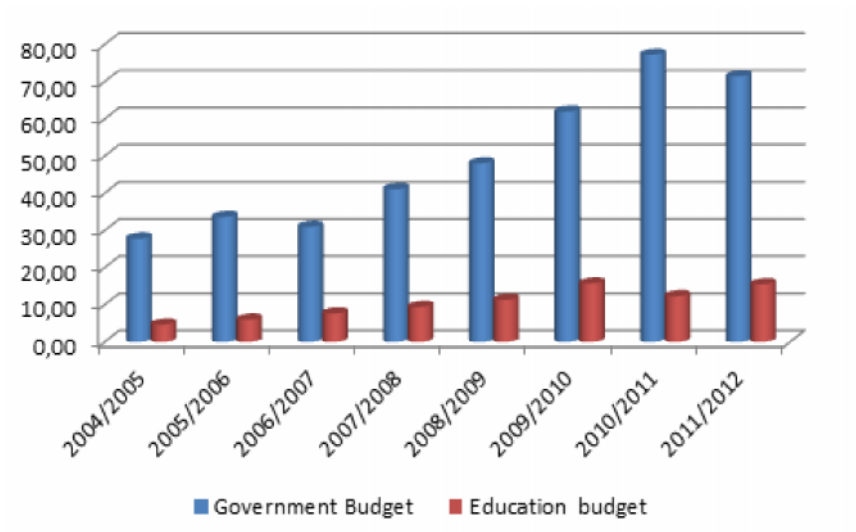
In summary, higher education funding policies and practices in Africa have been effectively and aggressively shaped by multilateral players, particularly the World Bank, for over several decades. The increasing importance of knowledge creation and dissemination – the main business of universities – in the globalized economy has helped jettison the long-standing policy impediments to the development of higher education. It is, however, important to note that while the Bank has played a role in degrading the development of higher education, it continues to shape the discourse – along the lines of the values it embraces.

The Cost of Higher Education

Financing higher education is an expensive enterprise – knowledge creation, knowledge dissemination and innovation do not come cheap. High-end expertise, expensive equipment and instruments, extensive infrastructure (such as laboratories, libraries and halls of residence) and the accompanying requisite logistics (such as information technology) and a complex academic culture entail that the sector, unlike its younger sister sub-sectors (primary and secondary education) is costly – without comparison (Teferra 2013a). It is *higher* education and it thus costs *more* and is *expensive*. In the light of the preponderance of these basic facts and explicit evidence, it is curious why for so long an argument has been peddled on high unit cost of higher education (in Africa) with severe consequences to the sector in particular and national development in general.

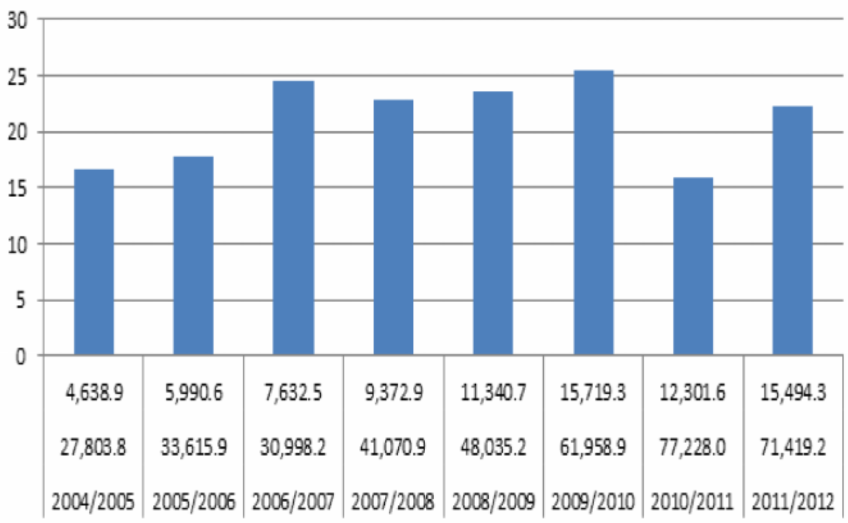
In this section, funding status and trends from different countries in SSA are discussed. One of the countries which have invested in higher education massively in the last decade is Ethiopia. Between 2005/06 and 2009/10, the average higher education budget in Ethiopia was 24 per cent of the education budget (Figure 2). In terms of the gross domestic product (GDP), the education sector in the country has also made a steady progress, growing from 3.1 per cent in 2005/06 to 7 per cent in 2009/10 (Figure 1; Moges 2013). In a decade or so, the Ethiopian higher education system witnessed phenomenal growth – from around 30,000 students in the late 1990s (Wondimu 2003) to more than 400,000 (Figure 3; MOE 2011).

Figure 1: Government and Education budget – Ethiopia (in Billion, Birr)



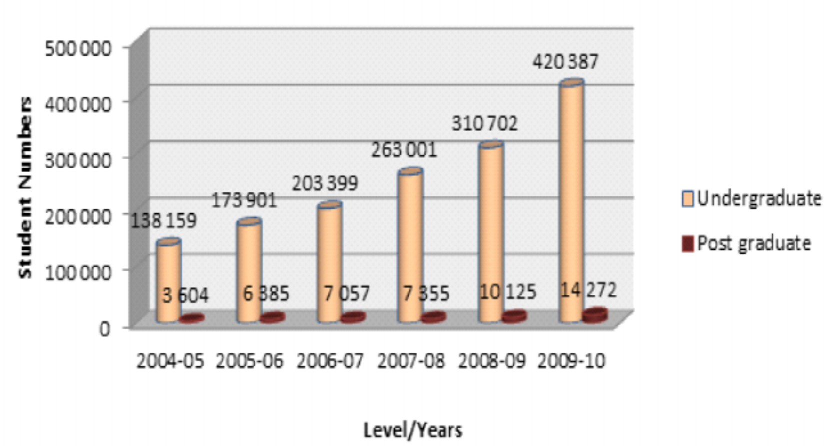
Source: Ministry of Education – Ethiopia, 2011 in Moges 2013.

Figure 2: Percentage of Education Budget – Ethiopia



Source: Ministry of Education, Ethiopia in Moges 2013.

Figure 3: Higher Education Enrolment – Ethiopia

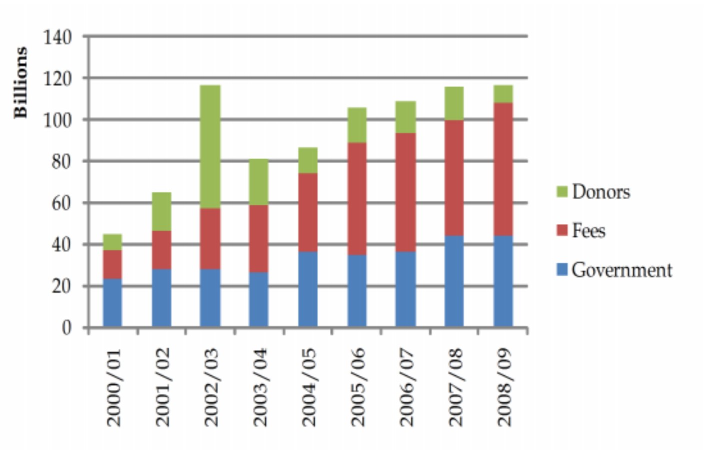


Source: MOE, 2011 in Moges 2013.

In 2007/08 only 7.3 per cent of development expenditure in Kenya went to university education compared to 81.6 per cent for primary and 1.5 per cent to secondary education (Abagi 2010 in Oanda 2013). The general trend has been fluctuating allocations from the government, which has compounded the problems of planning and quality in the institutions. For example, while in 2010/11 the government allocated KSh 48 billion (US$ 564.7 million) to public universities, this amount was reduced to KSh 44 billion (US$ 517.6 million) in 2011/12 (GOK 2011 in Oanda 2013). The symptoms of fluctuation are apparent as Kenya just increased funding for higher education by 30 per cent for the financial year beginning in July 2013, as it seeks to bankroll 15 new public universities. According to the Ministry of Finance, the funding for the Ministry of Higher Education, Science and Technology would increase from KSh 61 billion (US$ 717 million) during the current year to KSh 80 billion (US$ 941 million) in the coming year. According to an unpublished report (2013), the University of Nairobi gets 32 per cent of its revenue from the Government of Kenya, 40 per cent from tuition fees, 16 per cent from external grants and the remaining balance from accommodation, rent, endowment fund, and other income-generating units. Kenya's universities currently enrol 183,500 students, and admissions in the new universities are expected to help push enrolments to the 200,000 mark by the end of 2013 (Nganga 2013).

In Uganda, government funding for tertiary education has been declining over the years. In 2004/05, higher education received only about 10 per cent of the total education budget, or USh 619.93 billion (MoES 2005 in Oboko 2013). This rate has remained constant since the mid-1990s despite the great increase in enrolment (Figure 6). At Makerere University (Figures 4 & 5), the country's flagship institution, revenue from dual-track tuition policy have increased each academic year; in 2000, it generated more than 30 per cent of the university's internal revenue compared to almost complete financial dependence on government funding ten years earlier (Carrol 2004 in Oboko 2013). In 2009/10, however, these revenues increased to as much as 80 per cent (Oboko 2013). This phenomenal transformation was described as the "Makerere Miracle" in the early 2000s, but many remain critical of the implications of this miracle on the quality of teaching, learning and research (Sawyerr 2002).

Figure 4: Makerere University Funding Sources–2000-2009

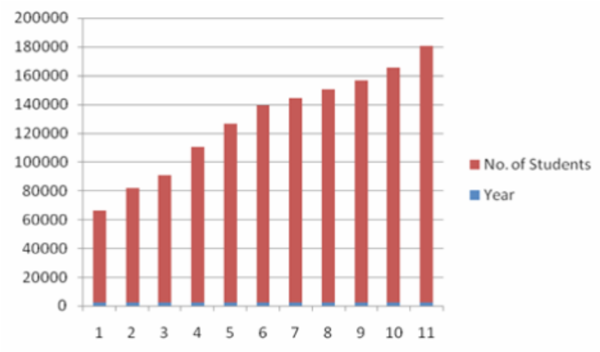


Source: Ssepweba *et al*. 2013.

Figure 5: Makerere University's Income and Expenditure

Source: Makerere University, 2010.

Figure 6: Student Enrolment in Uganda

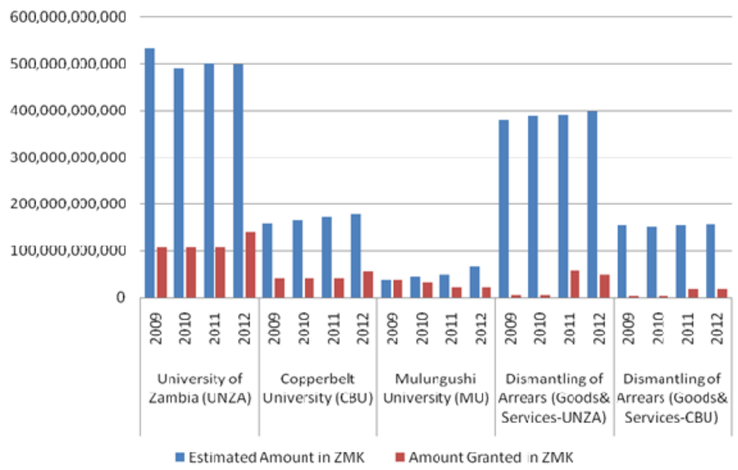


Source: Oboko 2013

In Zambia, the government could only dispense 20 per cent of institutional budgets (Figures 7&8). The funding level remained almost the same for three years, from 2009 to 2011, without regard to major inflation and depreciation of the local currency. For instance, as of January 2010 one US dollar was equivalent to more than 4,000 Zambian Kwacha; in 2012, one dollar was slightly over 5,000 Kwacha. The requirements for public institutions in the country 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 (Masaiti 2013).

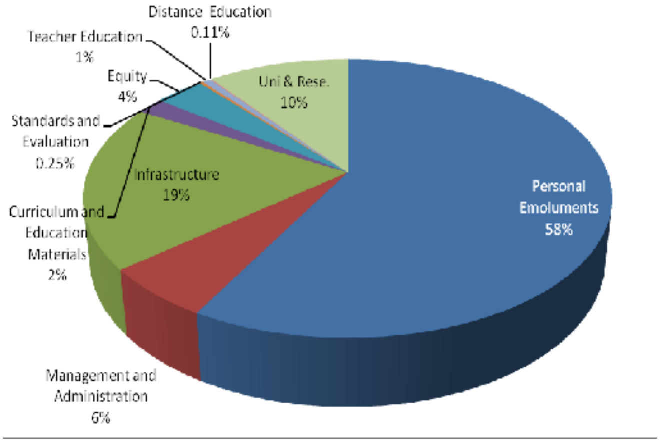
In Zimbabwe, one of the major problems now facing the universities, according to Mpofu, Chimhenga and Mafa (2013), is under-funding. This is not surprising considering that in recent times, government revenues have reduced sharply, while the national economy itself is in total chaos. The government, which statutorily bears the costs of higher education in the country, now faces tight budget constraints due to the collapse of the Zimbabwean economy, and the need to meet heavy and rising debt service obligations. Education is now a very low priority for the government and funding of universities is declining fast (Mbizvo 2011). In 1980, Zimbabwe had only one state university – the University of Zimbabwe. The country which had some 10,000 students in 2000 (Maunde 2003), now enrols some 90,000 students (Mpofu, Chimhenga and Mafa 2013).

Figure 7: Funding Patterns in Zambia Public Universities



Source: Masaiti, 2013.

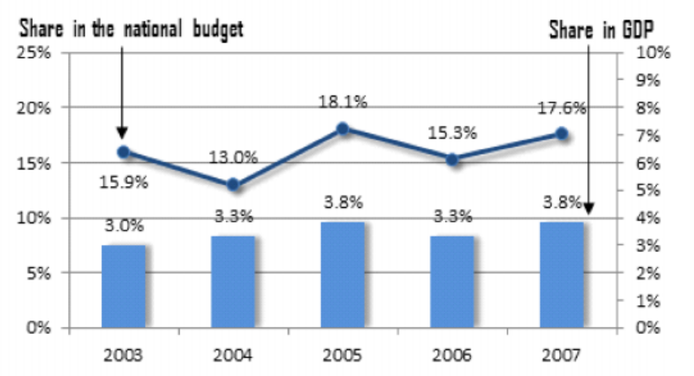
Figure 8: Allocation of Budget by Programme – Zambia



Source: MOE Strategic plan, 2009 in Masaiti, 2013.

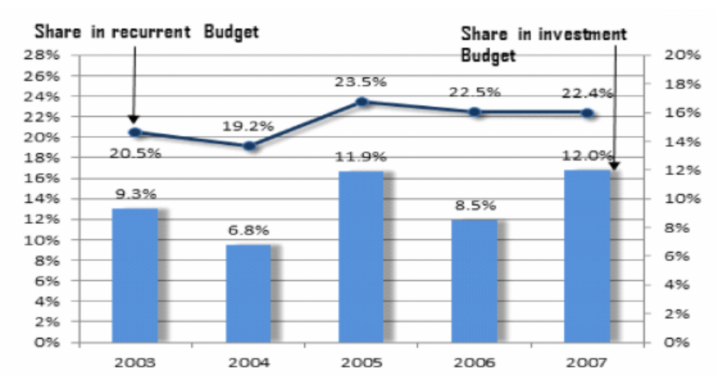
In Madagascar, the share of education in public expenditure as part of both the recurrent budget and investment budget slightly increased in 2007 compared to the rates in 2003, from 20.5 per cent to 22.4 per cent, and from 9.3 per cent to 12.0 per cent respectively (Figures 9&10; Randriamahenintsoa 2013). Examination of the actual allocation of education expenditure across levels of education shows that the share of higher education in the budget of the education sector is just over 12 per cent, while the first cycle of basic education continues to register a substantial increase from 2003 and 2006 (Zaafrane 2008 in Randriamahenintsoa 2013).

Figure 9: Share of Education Expenditures in GDP and the National Budget, Madagascar, 2003-2007



Source: Ministry of Education, Madagascar, 2008, Randriamahenintsoa 2013.

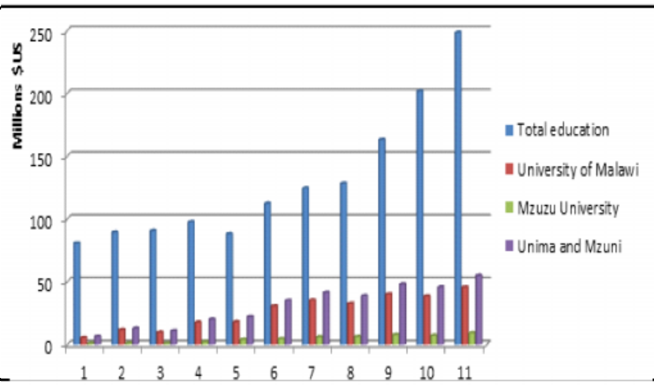
Figure 10: Share of Education in Public Expenditures, Madagascar, 2003-2007



Source: Ministry of Education, 2008, Randriamahenintsoa 2013.

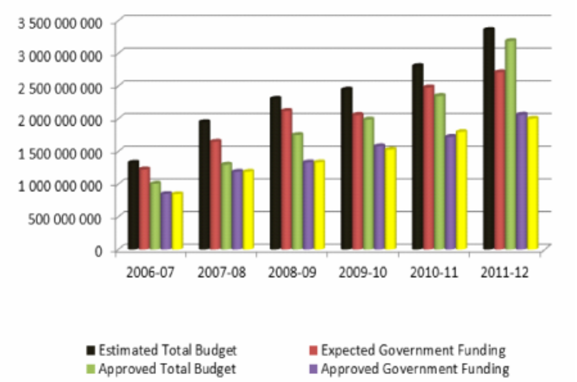
In Malawi, the public recurrent unit cost of university education, in terms of GDP per capita, is the highest in the world. This may be due to the very low GDP per capita in the country, but certainly it is also because the government bears the entire cost of public higher education (Figures 11 & 12). By the calculation in the period 2000 to 2008, the recurrent unit cost stood at 2,147 per cent of GDP per capita, which is seven times more than the Sub-Saharan African average (World Bank 2010).

Figure 11: Budget Allocation to the University of Malawi (UNIMA) and Mzuzu University (Mzuni), 2000-2011



Source: Ministry of Education budget documents, Malawi, 2000-2011 from Dunga 2013.

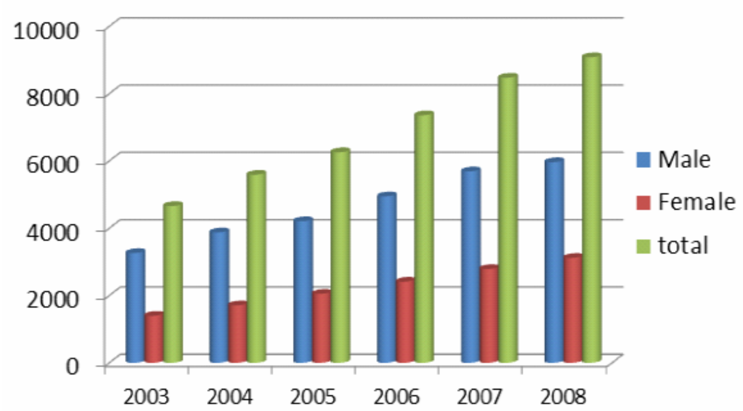
Figure 12: Funding Patterns in Malawi



Source: Dunga 2013.

The bigger share of the cost was consumed by emoluments leaving a very small percentage dedicated to teaching and learning, which means that the very high unit cost does not necessarily entail better quality. Malawi's higher education system, which has the lowest enrolment even by SSA standard, has more than doubled in over half-a-decade in excess of 10,000 (Figure 13; Dunga 2013) putting even more pressure on the sector.

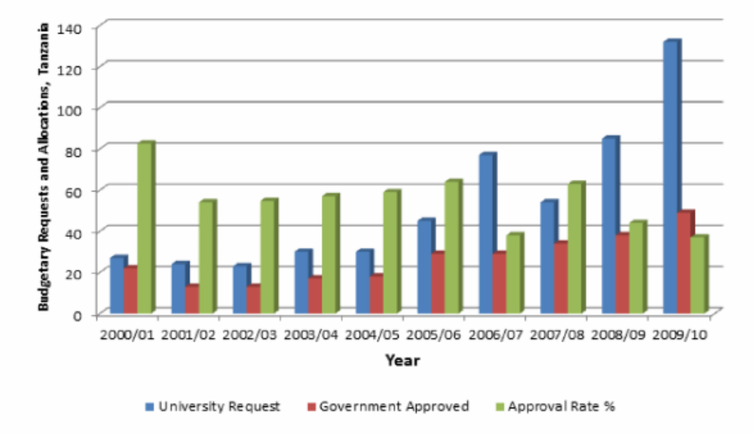
Figure 13: Student Enrollment in Malawi



Source: Dunga 2013.

In Tanzania, a country with a population of 43.6 million, as of 2010, eleven public universities and university colleges enrol 104,130 students (graduate and undergraduate, including non-degree students) while 20 private universities and university colleges enrol 37,509 students (27.7 %). As in Uganda's Makerere, while budgetary requests made by the University of Dar es Salaam, the country's flagship, increased from TSh 26.97 billion (USD 50.62 million) in 2000/01 to TSh 131.9 billion (USD 222.82 million) in 2009/10 – an increase of 79.5 per cent – government approval rates declined from 82.6 to 37 per cent during the same period (Ishengoma 2013). It should, however, be noted that despite the decline in government subvention to higher education, the absolute figures, as stated earlier, have shown growth (Figure 14).

Figure 14: Budget Approval Trend in Tanzania



Source: Ishengoma 2013

In Botswana, one of the few Sub-Saharan African countries that have attained middle-income status, the higher education system is funded through the traditional ad hoc method based on incremental budgeting where allocations are based mainly on economic growth, government revenues, inflation rates and the previous year's budget. This system, which claims close to 20 per cent enrolment rates – one of the highest in the region – fails to take into consideration important issues such as the student enrolment figures, academic programmes on offer at the various institutions, and institutional performance. The allocated amounts often depend on how well institutions are able to lobby. Based on the projected enrolment rates to hit 20 per cent, the government would need to spend an average of close to 5 per cent of GDP per year on tertiary education financing between 2010 and 2016. The annual share of the government's budget allocations for education amounted to 21 per cent in 2005 and 16.2 per cent in 2009, while 5.8 per cent and 6.7 per cent of GDP was devoted to tertiary education in 2007 and 2009 respectively (Damani and Molutsi 2013).

The Botswana higher education system is generally inefficient as there are too many overlaps in programme offerings and institutions' accountability to various government bodies. The government does not only finance public tertiary education institutions through subventions to cover both their annual recurrent and capital development budgets, but it also finances tuition and student support costs. The number of students who pay their way through tertiary education is very small; the private sector's contribution is also insignificant, leaving the burden of tertiary education financing almost entirely on the government. Recent tertiary education demands combined with declining public revenues show clearly that the government-dominated tertiary education financing system is unsustainable in the medium to long term. The need to adopt rigorous financial management reforms in terms of financial diversification for sustainability cannot be over-emphasized (Damani and Molutsi 2013).

The chronic shortfall of higher education funding in African institutions is systemic even in countries where major higher education growth and transformation has taken place. The cases in Tanzania and Zambia, as we saw earlier, are excellent examples of this persistent trend. In the case of the University of Dar-es-Salaam, the university's budget approval for the ten-year period of 2000/01 to 2009/10 has on average stayed at 50 per cent (Figure 10). It may not be an exaggeration that the mismatch between funding support and government approval may be unparalleled in Zambia than elsewhere in Africa. Between 2009 and 2012, the only two major universities – the Universities of Zambia and Copperbelt – were only granted 20 per cent of requested operational budget.

Funding Trends

Until recently, the African higher education landscape had been predominantly a public domain. The post-independence development movement, which started off with fervent commitment, energy and determination, placed higher education at a central location of national and regional progress. As a consequence, nations provided dedicated support and unmitigated leadership to higher education development.

Higher education institutions were fully funded: classrooms, laboratories and dormitories were well furnished; academics well paid; students received attractive allowances. Support from external sources – bilateral, multilateral and foundations – as well as governments, flowed readily. Those were the golden days of African higher education.

The enthusiasm and consequently support to higher education did not last long. The political, economic and social upheavals of the 1970s and 80s however drained much of that enthusiasm and support. Critical voices in higher education institutions challenging leaders of the independence struggle meant that governments regarded institutions as irrelevant ivory towers whose costs were not fully justified – a veiled reference to the flawed higher education policy discourse at the time. This probably could be marked as the lowest point in the history of African higher education.

The situation for African higher education system had not effectively changed until knowledge was officially declared as 'a key driver of growth and development' and investing in institutions of knowledge domain considered paramount to development (World Bank 2002). African tertiary education institutions and policy makers were urged to ensure that the workforce acquires the skills to compete, innovate and respond to complex social, environmental and economic situations. African higher education got liberated from the yokes of flawed policy that reigned on the African higher education landscape for decades (Teferra 2009b).

As higher education was declared vital to development and competitiveness and the rate of return study was declared irrelevant, several developments took place concurrently. The liberalization of the global economy, the General Agreement on Trade and Services, the expansion of private higher education providers, among others, has taken centre stage, affecting higher education funding directly. One of the critical elements that emerged from the aforementioned developments was the public versus private benefits (of higher education), which in turn introduced the cost-sharing practice to the policy floor. The dialogue and practice from one source of higher education funding to multiple sources has received much traction in recent times.

While the policy dilemma seems to have been resolved and African higher education is dubbed liberated (Teferra 2009d), the flow of resources has not been commensurate with the spirit of the liberation. As a matter of fact, in some countries the flow has actually precipitously declined – as in the cases of Tanzania and Uganda – prompting massive efforts of resource mobilization by respective institutions.

As African higher education got a 'blessing' from major development institutions – which had been critical of it – it was hit by a wave of 'massive' expansions that have taken off in a short span of time – with great implications on funding the sector. In many countries, the expansions have been taking place without commensurate financial, logistical and academic provisions with direct implications on the quality of higher education.

The discussion on trends in funding higher education would be bland without alluding to the economic trajectories of the different countries. Though many countries have made considerable and meaningful support to the higher education system, inflation, and in some countries hyperinflation, made that support rather ineffective. For instance, the massive inflation that hit 'Francophone Africa' had great implications for the funding of universities as its currency was sanctioned to float against the French Franc in the 1990s. Thus the external forces – both in policy discourse and monetary regimes – as well as the internal factors, characterized by social upheavals and economic slumps, have been instrumental in influencing the state and trend of funding African universities.

Who is Paying?

Until recently, African higher education had been an exclusive pasture of public domain – in form of free higher education. In essence, although social services such as education, health, housing or security are declared 'free' or 'public', some entity pays for them. In this regard, therefore, 'free' higher education is not free – it is a public investment of nations on citizens to advance national development through resources generated internally and externally.

The liberalization of the global economy and the shifting socio-economic paradigms are such that generating funds from sources other than the public purse have become acceptable – and even required. Institutions overwhelmed by sheer student numbers, dilapidated infrastructure and underpaid academics have started to generate own resources through a variety of forms – from instituting fee-based programmes to establishing private limited companies, to doing away with free perks and services.

The reality of this trend is nowhere more dramatic than in Makerere University, Uganda's premier institution. At the university, the number of fee-paying students have catapulted, as noted above, to such an extent that it increased its revenue from 30 per cent in 2000 (Musisi and Muwanga 2003) to more than 65 per cent in 2009-10 to as much as 80 per cent recently (Oboko 2013).

Generally, the cost of higher education is fast shifting from public spheres to private domains in many countries, largely spurred by constantly declining government subventions as well as institutional desire to fill the chronic financial shortfalls and increasingly shifting global socio-economic paradigms. Cost sharing was ushered into the lexicon of African higher education in the midst of shifting global economic dynamics and the proliferation of full fee-based private providers in the continent.

In a few countries new approaches to funding public higher education have been instituted: Ghana has introduced a Trust Fund; Zimbabwe a Cadet Scheme. Tanzania has also pledged to raise its commitment to research and development to one per cent of GDP. Kenya in early 2013 committed major funding increases to its higher education system – largely an outcome of political exigencies of election manifestos.

Funding research in African higher education is vastly dependent on foreign sources. In most higher education institutions, funding for research is pretty negligible, if at all. A good number of African universities are eternally dependent on external sources, notably the Scandinavian and other European countries, as well as US-based foundations. Tanzania, for example, has received some 750 million Norwegian Kroner from Norway since Norway got involved in supporting the higher education system of the country for over four decades (Teferra 2011). Regardless of the exorbitant costs of research, it is incomprehensible, and rather befuddling, that African governments would spend quite a substantial amount of public money to teaching and learning but dangerously ignore support to research and innovation.

Finally, while governments now encourage institutions to take a proactive role in generating resources on their own, many of them are, however, known to carefully regulate them. It is, therefore, not a 'free market' for institutions to levy fees – even when it is warranted. In Uganda, where the 'privatization of public institutions' is actively taking place, the executive and the legislature of the country are known to have overturned decisions regarding fee hikes by institutions – thus directly interfering with the autonomy of institutions.

Resource Mobilization

Universities and other tertiary education institutions in most of Africa are often under severe financial straits. While governmental revenues are absolutely critical and not to be minimized – the education institutions are limited in their capacity to be able to generate enough additional revenue to provide both the quality and the level of participation that the countries of Africa demand and deserve (Johnstone and Teferra 2004). As a result, institutions are increasingly engaging in a host of resource mobilization schemes in their quest to improve the academic and professional environment.

The change in the modality of financing higher education has spawned a variety of resource mobilization approaches under the mantra of cost-sharing schemes that straddle governments, students, staff and university administrations. The efficacy of cost sharing in many countries, however, largely depends on the allocation of dedicated funds by governments – as well as effective management. In Zimbabwe, for instance, the Cadetship Programme, a cost-sharing model, has had to struggle due to low funding for the scheme every year (Sylod *et al*. 2013). In 2012, only 10,000 students benefitted from the Cadetship scheme while more than 40,000 failed to access these funds. The government was reported as owing all state universities and colleges US$64 million in unpaid Cadetship grants (Nemukuyu 2013).

In countries where cost sharing has had a longer track record and thus gained recognition and acceptance, as in Kenya and Uganda for instance, the loan schemes for particularly Track II students, who are fee-paying, have been paramount. Even in South Africa where a robust higher education loan scheme exists, the resources are not unlimited. This potentially major resource mobilization effort has been stifled by numerous factors that include ineffective and poorly equipped management, non-committal executives, unenforceable policies, ineffective collecting mechanisms, poor employment environment, high inflation and devaluation.

At the institutional level, a host of resource generation activities has been launched. The most common and visible form of resource mobilization has been the deployment of private programmes in public universities. In what is articulated by Altbach as 'the privatization of public universities', programmes for 'private' students have become actively operational under 'Track1-Track 2', 'Mode I-Mode II' regimes. In this arrangement, students who cannot make it to the tuition-free regular programmes enrol as fee-paying in the parallel programmes. In some countries, the number of slots for the regular students, the Track I or Mode I ones, has over the years been shrinking while the fee-paying, Track II or Mode II, has been increasing considerably (Teferra 2013b). For instance, the contribution of Module II income to the total university income rose from about 3.8 per cent in 1997/98 to 33 per cent in 2002/03 at the University of Nairobi. At Kenyatta University, tuition fees from Mode II students accounted for 48 per cent of the university's revenues by 2009 (Oanda 2013). More dramatically, as we witnessed earlier, Makerere University has increased its income from 30 per cent to 80 per cent recently.

Many institutions have also been establishing businesses both as part as well independent entities of the universities. Universities now commonly operate such schemes as book stores, cafeterias, farms, and facility rentals on commercial basis. In other more advanced cases, as in Kenya, for example, Moi University has a registered limited private company independent of the institution run by a CEO.

Once the taboo of privatizing the public higher education system has been dismantled, institutions have also imposed new fee regimes on a variety of services including registration, exam, ID card, library, and IT fees. Institutions have found these internal resource generation approaches as less controversial than imposing hefty tuition fees, often a point of stiff resistance that draws undue attention of external stakeholders such as politicians, governments and the media.

To sum up, the foremost approach to raising resources in African institutions has been the introduction of fee-paying students and fee-based programmes in public institutions. While, other forms of resource mobilization are growing in number, they are still largely in their infancy.

The Scope of Private Higher Education

The dialogue on funding higher education often ignores the private institutions. And yet their importance in their share of enrolment in the region has reached 25 per cent – hence the need to undertake a closer look at the funding dynamics governing private institutions in Africa.

The state of private higher learning institutions in Africa is precarious due to both financial and policy predicaments. Policy issues aside, the financial sources of African private institutions are as much individual as they are institutional.

Quite a large number of private institutions in Africa are faith-based and their establishment (and running) is attributed to funding from religious organizations. In Tanzania, for instance, nearly 80 per cent of the private institutions are church-affiliated (Table 1; Ishengoma2013). In Zimbabwe, the government has approved charters that have led to the establishment of the following faith-affiliated universities: Solusi University run by the Seventh Day Adventist Church; Catholic University; Africa University, run by the American Methodist Church; The Reformed Church University run by the Dutch Reformed Church (Mpofu, Chimhenga and Mafa 2013).

Table 1: Ownership of Private Institutions in Tanzania

Group	%
Evangelical Lutheran Church of Tanzania	38.0
Roman Catholic	19.0
Other Christian religious denominations	19.0
Muslim	14.3
Other non-Christian and Muslim religious denominations	4.8
Non-religious	4.8

Source: Ishengoma, 2010.

In only a few countries in Africa, such as Liberia, and recently Kenya, do governments support private institutions by indirectly providing support to students in those institutions through, among other avenues, the provision of student loans. Many private institutions are now making strong arguments seeking support from public funding sources in consideration of the institutions' contribution to national development.

The External Resources

Africa still largely depends on external sources to develop its capacity and excellence in higher education–specially research. One of the popular approaches to revitalize higher education in Africa, and particularly promote research, has been through what is now a buzz word of the sector–Partnerships–namely: Regional Partnerships, South-South Partnerships, North-South Partnerships, North-South-South Partnerships, and North-North-South-South Partnerships.

In effect, higher education in Africa has always been an international affair owing to its history and trajectory and as such this development may not appear that surprising. Be that as it may, the magnitude of high-profile international partnership initiatives, specifically in higher education, has recently extended and strengthened.

As part of the broader geopolitical reality of the day, higher education in the region has also re-ignited increased interest around the world including the European Union and its member states, the United States, Canada, and new players like Brazil, China, India and South Korea (Teferra 2011). The snapshots of some of these partnerships are outlined below.

Africa-US Higher Education Initiative

In July 2007, a group of universities based in the United States and Africa came together to launch an initiative with intent to strengthen the capacity of African higher education through partnerships between African and US higher education institutions. The initiative was intended to facilitate more effective partnerships between African and US institutions of higher education to contribute in priority areas for development. The 2010 Omnibus Appropriations Bill, which includes Foreign Operations funding, was signed into law on 16 December 2009. The bill provides USD200 million for higher education programmes in developing countries, of which USD25 million was committed for programmes in Africa. Of this, USD15 million was allocated for partnerships between African and US institutions of higher education (http://www.aplu.org).

Canada-Africa Higher Education Partnership

The Association of African Universities (AAU) has formed a partnership with the Association of Universities and Colleges of Canada (AUCC) to strengthen higher education stakeholder relations in Africa. The initiative, 'Strengthening Higher Education Stakeholder Relations in Africa', had three components: Strengthening African University Outreach, University-Industry Linkages, and, Strengthening AAU Stakeholder Relations working in partnership with AUCC. While directly targeting a total of 27 African universities, the project was to lead to the development of a strategic plan and advocacy tools for all 250 AAU member institutions in 44 African countries (http://www.aau.org).

Southern Africa-Nordic Partnerships (SANORD)

University cooperation between Southern African countries and Nordic countries, otherwise known as SANORD, is a partnership of 25 research-led higher education institutions from Denmark, Finland, Iceland, Norway Sweden and institutions in Malawi, South Africa and Zambia. SANORD aims to advance multilateral academic collaboration between institutions in the Nordic countries and the Southern African regions, as they seek to address new local and global challenges of innovation and development. SANORD intends to bring together the leadership of Nordic and Southern African institutions of higher education and research for discussion, planning and joint endeavours. It also provides opportunities for academics to convene around issues and develop strategic cooperation projects while helping to build relevant relationships with the donor community, commerce, industry and the media (http://sanord.uwc.ac.za/).

European Union-African Union Partnership in Higher Education (EDULINK)

The objective of the EDULINK Programme is to foster capacity building and regional integration in the field of higher education through institutional networking. EDULINK represents a harmonized approach for the implementation of European Commission funded programs in the African Caribbean and Pacific countries (ACP) with a view to improving the effectiveness, management and impact of ACP-EU co-operation in the field of higher education. The support for higher education has changed with the introduction of new EC initiatives such as the 'ACP Science and Technology Programme', 'Erasmus Mundus' and the launching of the 'Intra-ACP Mobility Scheme', which is now called the Nyerere Consolidated Scholarship. This scholarship just got launched with a commitment of 35 million Euros (http://www.acp-edulink.eu/).

Scandinavian Partnerships

Partnership between Scandinavian and African universities is probably one of the most sustained and impressive forms of cooperation. Norway and Sweden in particular committed a large amount of funds for several decades, even when support for higher education in Africa was low. For instance, at a 'National Seminar on Norwegian Support to Higher Education in Tanzania' that took place in Dar es Salaam in November 2010, it was disclosed that NORAD committed NOK750 million to the sector for over four decades. The impact of this long-term commitment and support to capacity building, not simply institutionally but also nationally, has been rather impressive. Another similar impressive support is SAREC/SIDA's support to higher education research and development in Ethiopia for more than three decades.

The 'Historical' Partners

Guided by a variety of objectives and interests, numerous university cooperation arrangements between Africa and its 'historical' partners have been going for a while. These include the Austrian Partnership Programme in Higher Education and Research for Development (APPEAR), University Commission for Cooperation with Developing Countries (CUD, Belgium), Flemish Interuniversity Council (VLIR),German Academic Exchange Service (DAAD), Irish African Partnership for Research Capacity Building (IAP), Netherlands Organization for International Cooperation in Higher Education (NUFFIC) and United Kingdom's Education Partnerships for Africa (EPA). It should be noted that the impact, contributions and effectiveness of these eclectic partnerships vary considerably and many do not streamline their processes along the agreed terms of aid effectiveness in the Paris Declaration and the Accra Accord (though these agreements were not intended to address such partnerships).

The Emerging Partners

Emerging economic and political powers such as China, India, Brazil and South Korea are also engaged in a host of university development support programmes, as well as capacity building efforts in Africa. While, for instance, China has been involved in building infrastructure, and in certain cases as in Mozambique a major university library, and in Ethiopia, a fully-fledged technical college, the modalities of the support and partnerships are yet to be clear. Russia and other former Eastern bloc countries are also throwing themselves into the action, after two decades of absence from educational engagement in the region.

The Foundations

Overseas-based foundations have been known to play an important role in African higher education development. In 2000, several major US-based foundations had formed a consortium, known as Partnership for Higher Education in Africa, to revitalize the higher education sector in the region. This partnership that effectively culminated in 2010 supported institutions in nine African countries spending a total of USD350 million. The partnership supported 49 universities in these countries with 22 of them receiving 'significant funding for systematic transformation of the university as a whole'. The partnership countries were Egypt, Ghana, Kenya, Madagascar, Mozambique, Nigeria, South Africa, Tanzania and Uganda (http://www.foundationpartnership.org/index.php?id=9).

Players of Centre of Excellence

One of the most prominent centres of excellence initiatives currently underway is the Pan-African University. The intent of this initiative is to establish five hubs in five regions of the continent, each specializing in different fields. This major initiative conceived by Africans is largely dependent on consolidated funding from funders in Germany, Japan and India, among others. The African Development Bank has also expressed interest in supporting it, 'envisaging USD45 million for the first phase' (African Union 2012).

The World Bank has also announced a parallel Africa Centres of Excellence initiative in June 2013. The project targets strengthening seven to 10 higher education institutions in West and Central Africa, where 10 to 15 centres of excellence will be selected to focus on training and applied research in areas of relevance such as water, infrastructure, hospitality industries, banking, and information and communication technology. The World Bank will commit USD129 million, and eligible institutions could apply for funding of up to USD8 million per centre of excellence. The project is intended to promote regional specialization among participating universities and strengthen their ability to deliver quality training and research (Tongai 2013).

Yet, while the contribution of external sources to higher education in Africa is instrumental, it is miniscule compared to what respective countries invest in. It should be said that while the figures are miniscule, most of the external funding tends to target centrally on research, innovation and discourse platforms.

Samoff and Caroll (2003), hold that foreign aid to education in Africa is a small animal with a loud roar. For nearly all African countries, the major source of funds for education is the national treasury. With a few exceptions, foreign funding is a very small portion of total spending on education. Its attraction is that it is not, often may not be, allocated to education's recurrent costs. Government education spending pays teachers' salaries. To a lesser extent, it builds and maintains buildings, purchases textbooks and, where residential education is important, supports students' accommodation and board. Very little of it buys chalk or wall maps or copying machines or other supplies and equipment. Hardly any is available for innovation, experimentation and reform. There lies foreign aid's powerful roar. Its leverage is not its total volume but rather that educators with exhausted budgets can use it to expand, to alter priorities, to modify practices and, more generally, to respond to their own and others' sense of what needs to be done.

The Untapped Resources

This section explores some potential sources of funding and resources that have not been or have been barely tapped so far.

Diaspora

Africa's intellectual Diaspora represents an enormous but underutilized opportunity for African universities to connect to the global knowledge community. Numerous Diaspora groups are engaged in diverse academic; research, business and non-profit activities in their native countries, albeit largely on an ad hoc basis (Teferra 2010b).

In recognition of this, the African Scientific Institute and UNESCO organized a conference in 2009 on the theme, 'The African Diaspora scientific community mobilization for Africa'. The conference explored how African scientific and technical experts, and their international colleagues and partners, could help to address development issues in Africa (Adiascom 2009). The Association for the Development of Education in Africa (ADEA) has also recently established a body to pursue the mobilization of the scientific Diaspora community.

At the national level, countries including Ethiopia, Kenya and Senegal have established their own Diaspora organizations to promote national development including higher education. The Kenya Diaspora Network, for example, aims to align the resources and knowledge of Kenyan Diaspora organizations with the government's economic recovery plan and with the donors' country assistance plans. The network was formed in 2004 at the request of the Kenyan government, the World Bank Institute and the Western Hemisphere African Diaspora Network (WHADN), as an initiative of the African Union (Teferra 2010b).

Senegal has established a new Ministry for Diaspora Affairs, headed by a former member of the Diaspora. Ethiopia has had two Diaspora-related offices: one at the Ministry of Foreign Affairs and the other at the now defunct Ministry of Capacity Building. The South African Network of Skills Abroad (SANSA) was established to link highly skilled South Africans living overseas. In Nigeria, the National Universities Commission established the Nigerian Experts and Academics in the Diaspora Scheme (NEADS) to encourage Nigerian academics overseas to spend some time at Nigerian universities (Jibril and Obaje 2008).

The efforts to mobilize the African Diaspora are at different stages of development. Initiatives to systematically explore opportunities to tap alumni and the intellectual Diaspora communities in generating resources appear to be a long way off. But considerable lessons could be drawn from the Israeli and Chinese experience (see below).

Multinational Corporations

Prompted by massive raw material reserves and burgeoning business and economic opportunities, multinational corporations are expanding fast in Africa. These corporations often commit sizeable resources to institution building in their respective 'home' countries as part of their corporate responsibility to social and economic advancement (Teferra 2013b).

Multinational corporations should be persuaded to do the same in 'host' countries, which are potential markets, as well as potential pools of expertise to expand operations – and ultimately increase profits. The primary step of this effort begins with the identification of multinational corporations and major businesses in the respective countries followed by presentations with concrete, pragmatic and business-responsive proposals (Teferra 2009c).

Endowments and Foundations

Higher education institutions in the United States routinely and actively establish and build endowments. Some of the leading universities in the United States, such as Harvard, Princeton and MIT maintain multibillion-dollar endowments from which they reap multimillions in interest annually. It is certainly the affluence of the society, its unique tax system, the culture of charitable donation, and the strength of the economy that continue to drive the expansion of philanthropic practices in the United States (Teferra 2000).

The American and Canadian Friends of the Hebrew and Tel Aviv Universities actively generate resources and build endowments for the advancement of higher education in Israel. For instance, the American Friends of the Hebrew University was gearing up to raise US $1 billion after it raised more than US $600 million in 2000 (Teferra 2005a).

It is true that Africa has not pursued economic and financial incentives that nurture such a culture, but the practice of establishing endowments and foundations could be effectively promoted in the light of increasing economic progress and business opportunities in the continent. At a regional level, the Africa Science and Technology Endowment Fund, established by Africa-based multilateral agencies in 2010, is a good beginning (Teferra 2010a). At the country level, South Africa is more advanced in private philanthropy-endowing universities. For example, in 2000, the Development Office of the University of Cape Town (UCT) reported generating Rand 107 million (about USD10 million) from donors – a 14 per cent increase from the previous year. The overseas partners – the UCT Fund (US) and the UCT Trust (UK) – were central to achieving this goal, although 60 per cent of the campaign funds were raised in South Africa. Through the significant endowment funds that were raised, the university was able to start or continue building endowments for four chairs: the Nelson Mandela Chair of the Humanities, the Lesley Hill Chair of Plant Biology, the Pasvolsky Chair of Conservation Biology, and the Discovery Chair of Exercise and Sports Science (Teferra 2007).

Alumni Chapters/Associations

Tapping the extensive resources of alumni is one major issue that is overlooked in the development of higher education in Africa. African universities are not known to deploy their alumni in the pursuit of resources – financial, human and networking, among others. If such bodies, as alumni chapters exist and are known, they are often around foreign scholarship schemes, such as the Ford Foundation International Fellowships Programme and the DAAD Fellowship Alumni in respective countries.

The importance of alumni associations in capacitating African higher education need not be limited to human resource contribution and financial augmentation. Alumni associations, if effectively deployed, could help lobby governments for favourable higher education policies. As yet, African institutions have not taken the establishment and nurturing of alumni associations seriously.

University-industry Partnerships

A dialogue in university-industry linkages – for generating resources, promoting research or enhancing relevance – often attracts the simplistic argument of paucity of industries in the continent, hence the purported insignificance of such a scheme. This is probably because the definition of industry is narrowly stated as entities with large machineries that produce 'tangible and commercialized' products en masse. If, however, this understanding is broadened to service-providing industries and also growing multinational corporations, whose interests span from oil to mineral extractions, from personal electronic gadgets to auto industries, the numbers, and consequently their significance, will be considerable.

Regardless, the rhetoric around university-industry partnership in Africa abounds; though this has not taken off so far, due to a host of reasons, including the fledgling and fragile state of universities which failed to meet the needs of industry. With increasingly growing interest in Africa, the universities need to carve their competitive niche proactively so as to generate resources as well as consolidate research and teaching. For instance, more than 55 per cent of research in South Africa takes place in the 'business sector' and only 20 per cent happens in the universities (HESA 2012) – a sharp contrast to the rest of Africa.

Conclusion

Financing African higher education has undergone multiple phases of 'waxing and waning' (Ilon 2003). African higher education has been at the 'waxing' phase with major forces of development focusing on overhauling it. One only hopes that the current overhauling process to address these pressing issues will consider referring to 'alternative manuals' and 'alternative paradigms' (Teferra 2005b).

Even, after the rate of return study that shaped the higher education policy for decades was debunked over a decade ago, the discourse still looms large in many corners. It is not uncommon to hear in the corridors of power and high-level meetings presided over by politicians that higher education is costly and competes unfairly with other educational sub-sectors, particularly primary education. The scars of the flawed policy are yet to fully disappear from the minds of many who had read from the script. For the contemporary views to hold strong roots and for favourable higher education policies to be sustained, the Bank must endeavour to effectively dump its pervading views of the past, which are still widespread among development partners and recipient countries (Teferra 2009).

While the impact of destructive external factors will continue to linger around for some time, some obstructive internal policies need to also be addressed. For instance, in many countries, ministry of finance rules dictate that institutions return unutilized or self-generated resources, though this is changing, albeit slowly. These policies have had considerable impact on the resourcefulness and imagination of many public institutions. In another worrying scenario, after governments have allowed institutions to generate own resources, they have also withdrawn their support precipitously. In Uganda, for instance, the government subvention for the university of Makerere has dangerously declined to 30 per cent, leaving the institution to scramble to fill the gap by expanding its enrolment 'massively', thus creating numerous unintended consequences.

Furthermore, major development regimes, including the all-too-important Millennium Development Goals, do not directly and explicitly address higher education as a priority area, though all the elements of the development goals articulated need capacities generated from higher education institutions. Explicitly articulating higher education in the next developmental regimes, as MDGs, post-2015, may have direct implications on funding.

The expansion of the financial resource base for African higher education has to be actively, selectively and carefully undertaken. To offer a caveat: any 'solutions' may harbour their own unintended 'intrinsic artifacts' and 'defects' as witnessed in the case of Makerere University. Thus local, national, regional, and international realities need to be closely interrogated prior to espousing new modalities of resource mobilization. Academic institutions must be prudent in balancing their academic duties with entrepreneurship. There is little doubt that taking up these initiatives and actively engaging all the stakeholders require a conscious, qualified, and concerned university management (Teferra 1999).

The preceding discussion has shown that Africa deprives requisite funding to its higher education sector at its own peril. The competitive global world that deploys knowledge and innovation as its currency warrants investing – and strategically managing – the funding of African higher education. At the same time, the paradox of an ever-growing expansion of higher education against an already overstretched government resource may continue to pose serious challenge on the funding prospect of higher education in Africa.

A more complex challenge in the region will be to design and implement appropriate policies for financing secondary, vocational/technical and higher education. As increasing numbers of children complete primary education, they will have an expectation to enter secondary education, and graduates of secondary education will naturally have the wish to enter tertiary education. Policies of expanding upper levels of education must be considered in terms of balancing resource requirements and availability, social demands and economic needs for a more highly skilled workforce. Policy makers should also consider to what extent the government is responsible for providing educational services to meet all the needs from society (UNESCO 2011). This is particularly so for higher education financing as its cost rises at rates considerably in excess of the corresponding rates of increase of available revenues, especially those revenues that are dependent on taxation (Johnstone 2009). In this regard, the resources of some countries known to (have their nationals) spend a fortune overseas – as in Nigeria which is reported to spend N80 billion or US$ 500million in the UK alone and N1.5 trillion globally (Onyechere 2012) – could be effectively deployed in expanding and consolidating higher education nationally – and regionally. The same could be said of Botswana where the government invests heavily on higher education, but on ad hoc basis (Damane and Molutsi 2013).

In conclusion, many countries are already committing quite a large sum of their national budget to education – and a sizeable (disproportionate) amount of this to higher education. In others where the threshold has reached the optimum level, other means of generating alternative resources are simply mandatory. In countries where public funding is regressing in the hope of the system resourcing itself, dangerous consequences loom around the corner. Strategic and prudent choices, unadulterated by popular view and partisan interest, need to be made in funding higher education to help deploy it as a key instrument for the socio-economic development of nations.

References

Adiascom, 2009, 'African Diaspora Scientific Community Mobilization for Africa Initiative: International Conference', 29 June–1 July 2009, Paris: Adiascom, . www.adiascom.org/3.html

African Union, 2012, 'Report on the Pan African University' AU/ EXP/EDUC/ 6 (V), Department of Human Resources, Science and Technology, African Union Commission, African Union, Addis Ababa http://hrst.au.int/fr/sites/default/files/comedaf%20panafrican%20university_0.pdf

Amin, A.A. and Awung, W.J., 2005, *Economic Analysis of Private Returns to Investment in Education in Cameroon*, African Institute for Economic Development and Planning, Dakar. http://www.saga.cornell.edu/saga/educconf/amin.pdf

Association of African Universities, http://www.aau.org

Association of Public and Land-grant Universities, http://www.aplu.org

Bloom, D., Canning, D. and Chan, K., 2006, *Higher Education and Economic Development in Africa*, Washington DC: World Bank.

Damane, V. and Molutsi, P., 2013, 'Crisis of a Rich State: Botswana's Dilemma in Financing Tertiary Education' in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 13-37.

Dunga, S. Henry, 2013, 'Financing Higher Education in Malawi: Prospects, Challenges and Opportunities' in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 184-213.

European Union—ACP-EDULINK, http://www.acp-edulink.eu/

Higher Education South Africa (HESA), http://www.hesa.org.za/

Ilon, L., 2003, 'Foreign Aid Financing of Higher Education in Africa' in D. Teferra & P. G. Altbach (eds.), *African Higher Education: An International Reference Handbook*, Bloomington:Indiana University Press, pp. 61–72.

Ishengoma, J., 2013, 'Funding Higher Education in Tanzania: Modalities, Challenges, Prospects and a Proposal for New Funding Modalities' in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 214-246.

Jibril, M. & Obaje, A., 2008, 'Nigeria', in D. Teferra & J. Knight (eds.), *Higher Education in Africa: An International Dimension*, Chestnut Hill, MA and Accra: Boston College and Association of African Universities, , pp. 339-366.

Johnstone, D.B., 2009, *Financing higher education: Who pays and other issues*, Baltimore: The Johns Hopkins University Press.

Johnstone, B.D. and Teferra, D., 2004, 'Introduction', *Journal of Higher Education in Africa* 2(2), 1–5.

Leslie, L. Larry, 1990, 'Rates of Return as Informer of Public Policy: With Special Reference to the World Bank and Third World Countries', *Higher Education* 20, 271-286.

Lulat, Y. G.-M., 2003, 'The Development of Higher Education in Africa: A Historical Survey' in D. Teferra & P. G. Altbach (eds.), *African Higher Education: An International Reference Handbook*, Bloomington: Indiana University Press, pp. 15-31.

Masaiti, G., 2013, 'Students' Perceptions of Financing Public Universities in Zambia: Towards a More Sustainable and Inclusive Policy Strategy' in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 296-326.

Maunde, R., 2003, 'Zimbabwe' in D. Teferra & P. G. Altbach (eds.), *African Higher Education: An International Reference Handbook*, Bloomington: Indiana University Press, pp. 636-648.

Ministry of Education, Ethiopia, 2013.

Moges, Y., 2013, 'Funding Higher Education in Ethiopia: Modalities, Challenges, Opportunities and Prospects' in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 38-70.

Mpofu, J., Chimhenga, S. and Mafa, O., 2013, 'Funding Higher Education in Zimbabwe: The Experience, Challenges and Opportunities of the Cadetship Scheme' in D.

Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 327-350.

Musisi, N. B. and Muwanga, N. K., 2003, *Makerere University in transition 1993-2000: Opportunities and challenges*, London: James Currey.

Nemukuyu, D., 2013, 'Zimbabwe: Government Owes State Universities US $64 Million', *AllAfrica.com*, 31 March, Allafrica.com/stories/201303290370.html

Nganga, G., March 2013, 'Spending Boost of 30% to Finance New Universities', *University World News 263*, http://www.universityworldnews.com/article.php?story=20130314135924295s

NORHED, 2013, 'University of Nairobi' Unpublished report. Norwegian Programme for Capacity Development Higher Education, Oslo.

Oanda, I., 2013, 'Implications of Alternative Higher Education Financing Policies on Equity and Quality: The Kenyan Experience', in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 98-129.

Oboko, M. B., 2013, 'Funding of Higher Education in Uganda: With Special Emphasis on Donor's Role and Contribution of National Communities Approaches', in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 247-275.

Onyechere, November 2012, '$500m spent by Nigerian students in EU, US', TrustAfrica, Dakar, Senegal, http://www.trustafrica.org/index.php?option=com_content&task=view&id=354&Itemid=70&lang=en

Partnership for Higher Education in Africa, http://www.foundationpartnership.org/index.php?id=9

Psacharopoulos, G., 1985, 'Returns to Education: A Further International Update and Implications', *Journal of Human Resources* 20(4), 583-604.

Psacharopoulos, G., 1994, 'Returns to Investment in Education: A Global Update', *World Development* 22(9), 1325-1343.

Randriamahenintsoa, E., 2013, 'Challenges and Opportunities of Higher Education Funding Policies and Programs in Madagascar ' in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 147-183.

Samoff, J. and Carrol, B., 2003, 'From Manpower Planning to the Knowledge Era: World Bank Policies on Higher Education in Africa', Prepared for the UNESCO Forum on Higher Education, Research and Knowledge. Stanford University, Stanford.

Sawyerr, A., Dec. 2002, 'Challenges Facing African Universities: Selected Issues', Association of African Universities, Accra.

Southern Africa-Nordic Partnerships, http://sanord.uwc.ac.za/

Teferra, D., 2005a, 'Establishing Endowments for African Universities–Strategies for Implementation', *International Higher Education* 38, 22-23.

Teferra, D. and Altbach, P. G., 2003, 'Trends and Perspectives in African Higher Education', in D. Teferra & P. G. Altbach (eds.), *African Higher Education: An International Reference Handbook*, Bloomington: Indiana University Press, pp. 3-14.

Teferra, D., 1999, 'Ideas for Financing in Higher Education', *International Higher Education* 17, 7-9.

Teferra, D., 2000, 'Endowing African Universities–Cultivating Sustainability', *International Higher Education*.

Teferra, D., 2005b, 'Financing Higher Education in Sub-Saharan Africa' in *Higher Education in the World 2006: The Financing of Universities,* New York: Global Network for Innovation (GUNI) and Palgrave Macmillan, pp.153-164.

Teferra, D., 2007, 'Building Research Capacity in Ethiopia', https://www2.bc.edu/~teferra/Building_Research_Capacity_in_Ethiopia.html

Teferra, D., 2009a, 'Higher Education in Africa: The Dynamics of International Partnerships and Interventions' in Roberta M. Bassett & Alma M. Maldonado (eds.), *International Organizations and Higher Education Policy: Thinking Globally, Acting Locally?* New York:Taylor and Francis, pp. 155-173.

Teferra, D., 2009b, 'The World Bank's Perspective', *International Higher Education54*.

Teferra, D., 2009c, 'Mobilizing Multinational Corporations to Advance Higher Education and Research in Africa', *INHEA Editorial*, http://www.bc.edu/bc_org/avp/soe/cihe/inhea/editorial/Editorial07_Teferra.htm

Teferra, D., 2009d, 'Higher Education in Africa post-WCHE: Liberation, Affirmation, and Consolidation'. *INHEA Editorial*, http://www.bc.edu/content/bc/research/cihe/inhea/editorial/archives/aug2009.html

Teferra, D., 2010a, August 2010, 'Higher Education and Science & Technology in Africa: Tenuous Links, Emerging Trends and Neglected Initiatives?' *INHEA* Editorial, http://www.bc.edu/content/bc/research/cihe/inhea/editorial/archives/aug2010.html

Teferra, D., 2010b, 'Deploying Africa's Intellectual Diaspora: Potentials, Challenges and Strategies' in D. Teferra & H. Greijn (eds.), *Higher Education and Globalization: Challenges, Threats and Opportunities for Africa*, Boston and Maastricht: INHEA and Maastricht University, pp. 83-94.

Teferra, D., 2011w, 'The Market Place of Higher Education Partnerships: Re-Engaging Africa in the New Era of Internationalization', *INHEA Editorial*, http://www.bc.edu/research/cihe/inhea/editorial/archives.html

Teferra, D., 2013a, 'Introduction' in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 1-12.

Teferra, D., 2013b, 'Conclusion' in D. Teferra (ed.), *Funding Higher Education in Sub-Saharan Africa*, Hampshire: Palgrave MacMillan, pp. 351-363.

Tongai, I., 2013, 'World Bank Launches 'Centres of Excellence' Initiative' *University World News* 275, http://www.universityworldnews.com/article.php?story =2013060712280846.

UNESCO, 2011, *Financing Education in Sub-Saharan Africa. Meeting the Challenges of Expansion, Equity and Quality*, Montreal: UNESCO Institute for Statistics.

Wondimu, H., 2003, 'Ethiopia' in D. Teferra & P. G. Altbach (eds.), *African Higher Education: An International Reference Handbook*, Bloomington: Indiana University Press, pp. 316-325.

World Bank, 2002, *Constructing Knowledge Societies: New Challenges for Tertiary Education*, Washington, DC: World Bank.

World Bank, 2009, *Accelerating Catch-up: Tertiary Education for Growth in Sub-Saharan Africa*, Washington, DC: World Bank.

World Bank, 2010, *Financing Higher Education in Africa*, Washington, DC: World Bank.