Universidade de Aveiro Secção Autónoma de Ciências Sociais, Jurídicas e Políticas
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O FINANCIAMENTO DO ENSINO SUPERIOR PUBLICO NA ETIÓPIA

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THE FUNDING OF PUBLIC HIGHER EDUCATION IN ETHIOPIA: *Mechanisms and Effects*

Thesis presented to the University of Aveiro to fulfill the formalities essential to obtain the degree of European Master in Higher Education (Erasmus Mundus), done by the scientific supervision of the Dr. Pedro Nuno Freitas Lopes Teixeira, Associate Professor at the Faculty of Economics, University of Porto.

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Acknowledgement

I am gladly indebted to pay my greatest gratitude to my thesis supervisor, Dr. Pedro Nuno Teixeira, Associate Professor in the University of Porto. The expertise, experienced, resourcefulness and friendly supervision, feedbacks and comments were the sources of success for this thesis. It was an unforgettable professional experience that I have learned from him throughout this whole supervision time.

I would like to extend my special thanks for The European Commission for funding my Master study in all the three countries (Norway, Finland and Portugal).

I am also enormously thankful for all my interviewees at BDU. They were gracious enough in providing me the necessary information for this research with no reservation on their precious time.

Last but not least, I would like to thank my best friend Melese Gelaneh for easing my stay at Bahir Dar during my data collection time and for being collaborative with me in this crucial time of my research.

Thank You God for all, Hallelujah!!!!

Palavras-chave

Etiópia, o ensino superior público, a alocação de recursos, restrição financeira e geração de renda.

Resumo

Este estudo pretende discutir o financiamento do ensino superior público na Etiópia, centrando a sua atenção nas restrições financeiras e na diversificação de fontes de financiamento. Este estudo tem por finalidade analisar o modo como os constrangimentos financeiros afectam o funcionamento institucional e como as universidades tentam responder a esta questão. O estudo adopta uma abordagem qualitativa através d um estudo de caso. Os dados foram recolhidos através de entrevistas semi-estruturadas e de análise documental. Os resultados do estudo indicaram que a universidade analisada, à semelhança das universidades públicas na Etiópia, enfrentam sérias restrições financeiras na prossecução da sua missão, as quais afectam seriamente a qualidade das actividades de ensino e de investigação. A universidade estudada revela significativas dificuldades em gerar receitas alternativas. Apesar da autonomia financeira existente, a instituição revela alguma dificuldade em potenciar essas possibilidades. Na sequência dos resultados do estudo, são apresentadas algumas sugestõesde modo a melhorar a situação actual.

Key Words Ethiopia, public higher education, resource allocation, financial constraint, and income/revenue generation.

Abstract This study attempts to discuss the funding of public higher education in Ethiopia by specifically focusing on financial constraints and income generation issues. Its main purpose is analyzing how financial constraints are affecting the institutional operation and how are universities trying to respond to this. The study is a qualitative one, focusing on a single institution as a case study. Data were gathered using semi structured interview and document analysis. The results of the study indicate that the university in particular, and Ethiopia public universities in general, are facing serious financial constraints in their institutional missions and activities which in turn seriously affecting the quality of the teaching learning and the research work. The university presents significant weaknesses in generating significant alternative streams of revenue. Moreover, the institution seems unable to take advantage of the existing degree of financial autonomy At the end are presented some suggestions for improving the current situation.

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Acronyms and Abbreviations

ADA	Amhara Development Association
AIDS	Acquired Immune Deficiency Syndrome
BDU	Bahir Dar University
DIF	Development Innovative Fund
EPRDF	Ethiopia Peoples Revolutionary Democratic party
FBE	Faculty of Business and Economics
FDRE	Federal Democratic Republic of Ethiopia
GDP	Gross Domestic Product
GTZ	Duetsche Gesellschaft fur Technische Zusammenarbeit
HE	Higher Education
HEI	Higher Education Institution
HERQA	Higher Education Quality Assurance Agency
HESO	Higher Education System overhaul
HIV	Human Immunodeficiency Virus
ICT	Information Communications Technology
IMF	International Monetaru Fund
MoE	Ministry of Education
MoFED	Ministry of Finance and Economic Development
NGO	Non-Governmental organization
RPO	Research and Publication Office
SIDA	Swedish International Development Agency
UNDP	United National Development Program
UNESCO	United Nations Education, Scientific and Cultural organization
USD	United States (of America) Dollar

Chapter One

Introduction

Around the world, higher education is under pressure to change. It is growing fast and its contribution to economic success is seen as vital. Universities and other institutions are expected to fulfill multiple missions including the creation of knowledge; to improve equity; and to respond to student needs– and to do so more efficiently. They are increasingly competing for students, research funds and academic staff – both with the private sector and internationally.

Accordingly, it is a well-known fact that to attain all those missions any system of higher education be it in developed or in developing countries, needs to be financed or funded in one way or another- directly or indirectly to meet all the above public agendas. All its activities, functions and missions in the system require costly resources- from teachers' salaries to library facilities from physical building to computers, and so on. Thus, financing of higher education is central to the system's policy agenda.

The method adopted for financing education in any given country is among the major elements that shape the system. For instance, it will have major impacts in the extent of access for education, the type of education given, the pattern of student distribution, the level and quality of education, and the overall management and direction of education. In other words, the education of a given society and its role in helping meet a clearly set objective (for instance, development, economic and social growth) is closely tied with the resource available and the financing methods it employs (MoE, 2002). Hence, to attain an effective higher education system requires the right combination of sufficient funding, trained and talented employees, adequate facilities, state-of the art equipment and motivated students ready to learn.

Nonetheless, higher education faces problems throughout the world as many universities are struggling to obtain the necessary funds to develop their activities without raising worries about the quality of their performance. Thus, a major challenge faced by governments throughout the world, both in industrialized and developing countries, is how to reform the finance of higher education (HE) in response to the twin pressures of rising private demand for admission to HE and heavily constrained public budgets. The last twenty years or so have seen major changes in the way HE is financed in many countries, as governments have grappled with the problem of financing rapidly expanding systems of HE while public expenditure for education has failed to keep pace, or in some cases declined (Woodhall, 2007).

The financing of higher education throughout the world has seen dramatic—and also intellectually, ideologically, and politically contested—changes in turn to the 21st centuries (Johnstone, 2004). These dramatic changes with regard to financing of higher education occured, as indicated above, because the demand for education beyond the secondary level in most countries around the world is growing far faster than the ability or willingness of governments to provide public resources that are adequate to meet this demand.

Countries and institutions have responded to the mismatch between available public resources and the growing demand for tertiary education in several ways. The most frequent response has been to mobilize more resources principally by introducing or raising tuition fees as a way of increasing cost sharing. Another related response has been to seek additional private resources through the commercialization of research and other private uses of institutional facilities and staff. A third response, perhaps less commonly found response, has been an increased reliance on bond issuance and other forms of creative financing that allow for greater public/private partnerships in providing services related to tertiary education activities (Salmi and Haupman, 2006).

These financial challenges have been felt rather acutely by African Universities. This is because the funding challenges in most African Universities are more serious than those faced in developed countries. Obviously, higher education institutions clearly need well-designed academic programs and a clear mission. Most important to their success, however, are high-quality faculty, committed and well-prepared students and sufficient resources. Despite notable exceptions, most higher education institutions in developing countries suffer severe deficiencies in each of these areas. As a result, few perform to a consistently high standard (World Bank, 2000).

Macuacua (2008) has indicated the basic funding challenges in African Universities, which makes it more serious than the other world, as follows:

-The pressures of expansion and massification.
-The economic problems facing most African countries.
-A changed fiscal climate and policy direction induced by multilateral agencies.
-The pressure of other social and health issues (e.g. HIV-AIDS, frequent natural disasters, etc.) on the State Budgets.
-The inability of students to pay tuition rates.
-Misallocation of the available financial resources.

There is no question that the above funding challenges summarized by Macuacua are manifestations of almost all African Universities. This is because in Africa, higher education expansion is a recent phenomenon. Most African countries are still struggling with economic problem and poverty and state budgets are insufficient to cover the expansion undertaken in many countries. Moreover, in many countries there is the impression that the underfunding in universities is accompanied by misallocation of the available and very scarce resources. Ethiopian universities are no exception to these funding challenges.

1.1 Overview of the Ethiopian Context

Ethiopia, as one of the poorest country in the world, presents of very low enrollment in HE and small number of higher education institutions. To change this, Ethiopia is currently embarking on a major higher education expansion and reform programs in an impressive dimension. During the past few years, the federal government of Ethiopia has invested significantly in its higher education sector towards increasing access and relevance. The expansions are creating new universities, mounting new fields of studies, and more than tripling enrolments. Reforms initiated have encouraged institutional autonomy, curriculum revisions, new funding arrangements and student contributions by means of a graduate tax as a result of introducing cost sharing.

There are indeed some indications that access to higher education has dramatically increased as a result of such government investment. However, this phenomenal quantitative expansion brings with it manifolds of problems and challenges, quality and scarcity of resources or financial constraints being the greatest challenges of this massive expansion.

Currently, with the massive expansion trend of the higher education system in Ethiopia, there are serious concerns about the quality of teaching and learning and research. The massive expansion brought with it insufficiency of appropriate teaching learning resources for both students and teachers, reduced teachers motive of teaching, less motive of consultancy by the teacher. It is common now to see teachers having lots of students as advisee for research. Fisher and Swindells (2008) indicated that Higher Education students in Ethiopia are often de-motivated as a consequence of the lack of learning materials, their poor living conditions, lack of different resources and uncertain employment prospects. This is actually always related with the insufficiency of budget available for the different activities in the institutions.

Any national tertiary system would be hard pressed to substantially expand enrolments while maintaining levels of educational quality. Ethiopia faces a double challenge in this regard. If the bold vision contained in the new Higher Education Proclamation (FDRE, 2003a), which is launched on 2003 and modified in 2009, is to have any chance of success, the solution to this double challenge will have to be found in the financing strategy that underpins and supports these reforms (World Bank, 2003).

In 2006, public education spending accounted for approximately 6 percent of GDP and 17.5 percent of total government expenditures. Of the public expenditure on education, higher education accounts for about 31 percent (World Bank, 2008). The current budget increased from approximately $10 million in 1996 to over $60 million in 2004 and the capital budget investment grew from less than $8 million in 1996 to over $90 million in real terms in 2004 (Teshome 2007). Estimated public recurrent spending per student at higher education level for 2005/06 was reported as 6,646 Birr (2006/07 Annual Education Abstract of the Ministry of Education). Most universities in Ethiopia are still complaining from budget shortage as related to the rapid increase in student population. However, as it can be seen above, the current budget allocation has grown more than five times in the last ten years. In addition, the capital budget investment for higher education in Ethiopia has increased from less than 70 million Ethiopian Birr in 1995/6 to over 700 million Ethiopian Birr in 2004 (Teshome, 2007).

For all the current higher education reforms and expansion in Ethiopia, the Higher Education Proclamation (FDRE, 2003a) takes the credit as it was the major step forward in showing policy and strategy decisions of the sector in Ethiopia. The major provisions of the proclamation relate to administrative and financial autonomy of institutions, introduction of cost sharing in the form of graduate tax, income generation and contracting out of services, and the allocation of block grant budgeting system using a funding formula (Teshome, 2007). However, of all these reforms prescribed on the 2003 proclamation, the most important ones, that of financial reform in higher education- using formula is not yet implemented at national as well as institutional level. This leaves space for sustaining line item budgeting, which is found to be inefficient, encouraging budget flow back to central government and underutilizing the inadequately allocated resource.

1.2 The Research Problem

Generally speaking, the current funding model of Ethiopian higher education can be characterized by what economists call a ‘Centrally Planned’ or ‘Command system’, a funding model, which has been the preferred mode of public funding for higher education across much of the world (HESO, 2004). The government realized that as the higher education system is rapidly expanding, a line-by-line negotiation of higher education institutions budget would become impractical and inefficient. Thus, it was introduced a Higher Education Proclamation in 2003. The Ethiopian Higher Education Proclamation called for the introduction of a block grant approach for the funding of the higher education institutions in Ethiopia as part of this modernizing agenda. The development of a fair, effective and efficient funding formula for deciding on the individual block grants was therefore an inevitable prerequisite for this to happen.

As it is indicated in the Higher Education Proclamation, the source of income of a public institution consist of an annual block grant budget allocated by the government, subsidies made by government in cash or kind, income generated from services delivered by the institutions such as research, continuing education and distance education, consultancy and such other activities undertaken by the institution to generate income (Article 48-55). However, higher education institutions in Ethiopia are poor in mobilizing their financial, material and human resources to improve access, quality, efficiency and equity issues (Teshome, 2007). And even universities are usually complaining of shortage of resources (especially financial resources) mostly because both they are not efficiently allocating and utilizing their government allocated funds and also have not been generating income as much as they could. Supporting this, HESO (2004) report has confirmed that currently many private HEIs have better developed financial and resource management systems than public HEIs. Thus, these all has to do something with the insufficient availability of resource (being under funded), lack of efficient utilization of resources and appropriate resource allocation mechanisms of scarce resources for universities in poor countries like Ethiopia.

As is indicated by Reisberg & Rumbley (2009), the cost of educating a growing cohort of university students quickly exceeds available government funds. A new policy (the cost sharing) has moved the country away from fully publicly subsidized higher education to a cost recovery scheme, but this system will not return funds to government coffers for several years to come. The government currently depends on international aid as well as expatriate faculty to fill in the many gaps that result from the rapid growth of higher education. Ethiopian higher education is also very dependent on donor-led financing (HESO, 2004). But even with aid, funding is insufficient to address the enormous needs of this nascent system. Moreover, the World Bank report of 2004 indicates that the growth of Ethiopia's higher education system is outstripping the revenue available to sustain it, and that a medium term funding gap will exist over the next ten years until income from the graduate tax begins to produce a meaningful flow (Ashcroft, 2008). The fact is that this financial constraint at national level will directly affect the missions and activities of the institutions in the country.

Thus, this study attempts to analyze how financial constraints are affecting institutional operations or missions. Moreover, the study investigates to what extent public universities are trying to diversify their funding base. It also tries to examine to what extent university administrators have autonomy on institutional expenditures. This study was conducted in one public higher education institution, Bahir Dar University, which will provide a portrait of the way public universities are dealing with those challenges. Thus, the following questions are raised to investigate the issue:

Research Questions

- How significant are the financial constraints for public higher education in Ethiopia?
- How are public universities responding to these financial constraints?
- How does the current institutional allocation mechanism affect the different activities in the institution?
- What have been its major impacts? How is this affecting the fulfillment of its institutional missions?

Purposes of the study

- To assess how resources are allocated in public higher education in Ethiopia and the rationale for using the mechanism.
- To examine the extent of financial constraints in public universities and its effects on institutional operations.
- To investigate whether the higher education institutions are trying to generate additional revenues and how.
- To examine whether the current funding mechanism of higher education provide financial autonomy for basic institutional expenditures.

1.3 Significance of the Study

This study is significant in that it

- Highlights about the current funding/resource allocation mechanism of public higher education in Ethiopia.
- Could indicate issues of financial constraint, revenue generation and financial autonomy with regard to funding in Ethiopian context.
- Can also help as one reference for further study in the area.

1.4 Scope of the Study

This study is delimited to a single case study of a single public institution in Ethiopia, Bahir Dar University (BDU). The study focuses on exploring only the funding issues of the university. It includes the issues of financial constraint, resource allocation and income generation. Thus, this study does not investigate other broader issues of funding or financing HE. Therefore, general issues of funding HE at national level are not the main points of discussion in this study. In addition, the rationale for the choice of case study is the capacity of the approach in providing an in-depth data about an institution in the study. In this case, BDU is selected as a case study university because the university as a public institution can be considered as an average university in terms of age of the university, size of the university, student number, budget allocated and mode of expansion in the country. Thus, this will enable to glimpse about the other public universities in the country. Moreover, a single university is opted for case study because of manageability of including all public institutions within the time frame.

In the next chapter, the theoretical issues of funding, resource allocation, revenue generation and financial autonomy will be analyzed in brief. Then, chapter 3 is presented for a more specific understanding of the higher education system in Ethiopia. In chapter 4, the detailed methodological issues to be used for this study are discussed. Chapter five presents the analysis and discussion of the collected data. Finally, conclusion is presented with some suggestions in chapter 6.

Chapter Two

Funding, Resource Allocation & Income Generation

For any HEI to effectively perform its activities and roles, there must be adequate funding in the first place; and their must also be effective and efficient system of financial management. This is because achieving the missions and activities of HE largely depends on funding- the amount and the way resources are allocated and utilized. However, the greatest challenge for HEIs especially in developing world is the financial constraint they are facing. The root for financial constraint in developing country lies in the combination of increased demand for HE and unmatched public expenditures on HE. This chapter, thus, deals about the basic issues and concepts with regard to higher education funding or financing. Accordingly, five different issues are reviewed. The first part deals about financing of higher education in global dimension. The second part focuses on resource allocation mechanisms in higher education, by illustrating the basic mechanisms. The third one deals about revenue diversification in higher education. The fourth part is about financial autonomy in a very brief manner. And lastly, the funding of higher education in developing countries with major issues and trends is treated.

2.1 Funding Higher Education: Global Trends

As higher education is viewed increasingly as an instrument of economic development, there are pressures to contribute to nations' development, to create both more graduates and research opportunities in different fields of studies. Invariably, this means a search for more resources to finance the laboratories, workshops, and practical training of students and the recruitment and retention of competent faculty in these areas (Albrecht and Ziderman, 1995). Thus, funding, resource allocation, and performance in higher education systems have emerged as key issues in many countries and at different levels of policy and research management (Herbst, 2004). When looking back over the development history of higher education worldwide, there have been consistent reform agendas for the financing mechanism for higher education (Johnstone, 1998). That is, pressure to reform the financing of higher education has mounted in virtually every part of the world.

According to a study by Johnstone (1998), hence, the decade of the 90's has seen a remarkably consistent worldwide reform agenda for the finance and management of universities and other institutions of higher education. The modern world of tertiary education, as Johnstone indicated it, is undergoing enormous reforms and this finance and management reform agenda can usefully be viewed in the context of five themes:

(1) *Expansion and Diversification*--of enrollments, participation rates, and number and types of institutions;
(2) *Fiscal pressure*—as measured in low and declining per-student expenditures and as seen in overcrowding, low-paid (or unpaid) faculty, lack of academic equipment or libraries, and dilapidated physical plants;
(3) *Markets*--the ascendance of market orientations and solutions, and the search for non-governmental revenue;
(4) *The Demand for Greater Accountability*—on the part of institutions and faculty, and on behalf of students, employers, and those who pay; and
(5) *The Demand for Greater Quality and Efficiency*—more rigor, more relevance, and more learning.

The financing of higher education, thus, has seen dramatic changes especially in the last two decades. Changes in the finance of higher education introduced in the past twenty years include the introduction of tuition fees or other charges in countries where higher education's tuition was previously free, substantial increases in tuition fees in several countries where they did previously exist, and changes in student aid systems, including in many countries a shift towards student loans to supplement or replace grants, all leading to the decline of public expenditure (Woodhall, 2007). Such changes have been the subject of controversy and debate. These changes in the financing of higher education are clear indications by the government for a decline of public expenditures in higher education, which in turn leads to fiscal pressure and financial constraints.

The decline in the share of public expenditure on higher education has been one of the most important trends in the area. Compelled by economic reform policies or convinced of the rationale for the reduced role of the state in funding higher education, most countries have inflicted serious cuts in public budgets for higher education. This trend exists in many countries, in some or all of the following areas: total public expenditure on higher education, per student expenditures, public higher education expenditure's share in relation to a particular country's national income or total government budget expenditure, and allocations in absolute and relative terms to important programs that include research, scholarships, and so on (Tilak, 2006).

The launching of neo-liberal economic reforms in most developing and developed countries of the world has led to shrinking the pubic budgets for higher education. A general worldwide phenomenon has been the movement away from near total public funding of higher education to a more heavy reliance on private funding and the principle of user pays (Meek, Teichler & Kearney, 2009). The reform policies, as described by Tilak (2005), clearly involved drastic cut in public expenditures across the board, including higher education, necessitating a search for alternative methods of funding higher education.

In line with this, Tilak notices six major trends in funding higher education in a global dimension. First, the decline in public expenditure has been a major trend. The late 20th century witnessed a decrease in public funding for higher education, relative to private funding, in most parts of the world (World Bank, 2002 cited in Eastman, 2007). In many OECD countries, the proportion of institutional funding received from the state declined (OECD, 2004).

The second major trend in the recent years has been increased efforts to cost recovery through introduction of tuition fees in societies where higher education used to be provided by charging no fees, and increase in fee rates in others where fees already exist. Obviously, the decline in public expenditure is accompanied by increased efforts regarding cost recovery. Though a good number of countries used to provide higher education for free, now except for a few countries (e.g., Brazil, Sri Lanka, Tanzania, and some European countries) a majority of countries now charge fees in higher education, in some cases small nominal and in others reasonably large amounts (Tilak).

The third trend in funding higher education is by the use of student loans. Student loan programs are particularly becoming popular in many countries, though loans as a mechanism of financing of education are also associated with certain inherent weaknesses, apart from poor rates of recovery. In recent years, loans were introduced in many countries, such as China and Thailand, where they did not exist earlier. The fundamental assumption underlying loan program is that higher education is neither a public good nor a social-merit good but rather a highly individualized private good, as the mechanism of loans shifts the responsibility of funding higher education from society to families and more importantly within families from the parents to the individual students themselves.

Fourthly, governments began insisting on the public universities to generate resources from 'third parties' such as corporate sector. Accordingly, public universities in many countries have developed various kinds of mechanisms of generating funds from the corporate sector. Following the trend of reduced public support, many HEIs responded to these reductions in funding first by cutting costs and then by seeking new sources of revenue. An increasing reliance on corporate and non-governmental funds by universities may shift the balance of higher education's missions towards activities with the greatest commercial potential, in the end changing the very character of HEIs.

Fifthly, privatization has become the mantra of the day everywhere, including higher education. Many modes of generation of funds for higher education do mean privatization of public higher education. Governments in many countries seem to be increasingly wedded to the neo-liberal philosophy that exemplifies the role of markets in every sphere, and they promote the growth of private higher education institutions, most of which can be described 'for-profit' institutions. The wave of privatization of higher education has become so massive that even predominantly public higher education systems began to emerge as predominantly private in a very short period, making the relative presence of the public higher education sector almost invisible (Tilak). Lastly, the cuts in public grants to higher education in many countries also forced them to go across the boarders in search of finances. Under the name of internationalization, many universities have been following aggressive policies of attracting foreign students.

The emergence of these new trends, changes and reforms of financing higher education had been accompanied by various factors and reasons. Sanyal and Martin (2006) have indicated a list of six factors influencing the new trends of financing higher education. These are: massive expansion in higher education, inability of the state to finance this massive expansion leading to the emergence of the private sector, the rationale for cost-sharing with parents and students, the public call for accountability and 'value for money', the emergence of foreign providers through the General Agreement on Trade for Services (GATS), and finally, the need for adjustment in state funding to reduce widening disparity; all of which go in line with what Johnstone (1998) described under themes of financing and management reform agendas earlier.

When we see the current trends of higher education, greater percentages of the population of most countries are demanding more higher education. Thus, demand for higher education is rising rapidly especially in countries characterized by rapidly growing populations and low current levels of participation – conditions describing much of the developing, or less industrialized, world (Johnstone, 2002). Hence, according to available statistics, total enrollment in higher education increased from 68.6 to 110.7 million approximately between 1990-1 and 2001-2; developing countries doubled their total enrollment from 29.3 to 58.3 million, while the countries in transition and the developed countries increased their enrollment from 8.5 to 12.2 million and from 30.8 to 40.3 million respectively (Sanyal & Martin, 2006).

Secondly, this massive expansion requires to a greater extent large amount of resources than ever before in which the capacity of the government alone cannot accommodate, especially in developing countries wherein the higher education system is highly underfunded and donor-based. As Johnstone (2002) indicated, this high and rapidly increasing costs and rapidly rising enrolment pressures place enormous strains on whatever part of total higher education expenditure is being borne by the government. Since the massive expansion could not be matched by the corresponding expansion of the state finance, the private sector financing in higher education is emerging all over the world.

Third, due to the inability of the government to bear the cost pressure, some of the costs are being shifted to the parents and students with the emergence of the phenomena of cost sharing. This is being achieved through the introduction and increase of tuition fees, withdrawal of subsidies and maintenance grants and introduction of student loans.

Fourth, cost sharing is making the public at large and the students and their parents in particular demand 'value for money' (Sanyal and Martin, 2006). The taxpayer and the students want more transparency and accountability in the way the money they pay is being spent. This calls for the involvement of improved financial management in the financial of higher education.

Fifth, GATS of the World Trade Organization makes higher education a tradable commodity. Studies abroad, cross-border provision of higher education, private institutions run by foreign agencies and employment of foreign teachers are the four kinds of trade in higher education (UNESCO, 2000 cited in Sanyal & Martin). For developing countries, finance may be available from abroad through governments or through private sources shifting the paradigm of financing higher education. For industrialized rich countries, the liberalization may reduce their monopoly in exporting higher education with the arrival of countries like India, Korea and South Africa on the one hand, and widen the scope of their export of higher education with implications for financing on the other hand (Sunyal and Martin, 2006). And lastly, the diversification of funding sources away from the state and the introduction of GATS will increase the individual cost of HE and will widen the inequality of opportunities (Sunyal and Martin). The state funding mechanism will have to make adjustments to face this challenge.

All in all, the above factors are influencing the mission of HE systems and institutions and having an impact on the financing of higher education. As it has been indicated above, we have discussed about financing of higher education and the current trends for financing the HE system. Equally important with this is the discussion of resource allocation in HEIs as this has important implication for the way allocated funds are used and for issues like efficiency especially in times of budget cut by the state and financial constraint. Thus, now we move to the discussion of resource allocation.

2.2 Resource Allocation Mechanisms in Higher education

When talking about resource allocation in higher education, the most important questions here are 'Why financing education in general and higher education in particular?'; 'who should pay?'; 'How much do we need?'. This requires the understanding of the rationale for public higher education funding.

Public expenditure on higher education is a significant part of total public expenditure. This is justified by the crucial role higher education plays in the development of national economies and societies into knowledge-based economies and societies (Kaiser, Vossenseyn & Koelman, 2001). Nations fund higher education to cultivate the necessary human capital, to enhance productivity through research and development and also to attain economic advancement of a nation. Clearly, Education as a means to generate the human capital that will guarantee the future satisfaction and earning of the nation has economic benefits such as increase in productivity, security for job employment, creates wealth through better labour, capital, resource, technology and management. Education also adds richness of life for its recipients, stimulates the economic growth through increase in productivity and gains in social, political, economic, technological and environmental advancement. These all can only be gained through education in that education especially higher education leads to both personal as well as social benefits, according to Behrman & Stacey (2000) include a more educated & better informed electorate, lower rates of crime & violence, lower rates of poverty, better health & nutrition & generally a more smoothly functioning society. Thus, understanding the values of education and higher education in particular is indicative that financing it is of central importance.

When looking into the sources of higher education finance (who should pay?), the particular country's national context matters. This is because the choice of intervention to fund higher education will vary from country to country depending on the economic level, size, policy and development needs of the nation among other factors. Despite the differences nations might have, higher education funding can come (from the government or private sector) either in the form of public funding or private funding or a combination of both. On the other hand, according to UNESCO (2002) report, sources of education finance, more generally, can be divided into two major categories: Internal (domestic) and external (foreign) sources. Thus, funding for higher education should come from public/government sources mainly from taxes; but also from nongovernmental sources which can include the consumers (students), their families, private investors, NGOs, donation, philanthropies, etc.

Then, comes the question 'How should we finance higher education?' or 'How are funds made available?' Basically, higher education finance should be managed to ensure efficiency and effectiveness in its acquisition and use with budget constraints. Barr (2004) has indicated that achieving HE primary objectives rests on using resources efficiently and distributing them equitable. In this case, the issue of resource allocation forces us to see what allocative (External) and productive (Internal) efficiency. Allocative (external) efficiency, according to Barr, applies to totality of resources devoted to tertiary education and also to the division of resources between the different parts of tertiary education, within HE, their division between subjects and universities and between spending on universities and on student support. Where as, internal efficiency is concerned with the quality of university management. Hence, for better understanding, the discussion of different funding mechanisms or resource allocation mechanisms is of great importance.

But before, it would be appropriate to give some broader definition of what resource allocation means. Accordingly, Prowle and Morgan (2005) as cited in Woods (2008) define a perfect resource allocation model as one which

> *"provides the greatest overall satisfaction in meeting objectives whilst simultaneously constraining the use of resources to exactly those which are available."*

Resource allocation models are important management tools for implementing strategy; Resource allocation also provides an important mechanism for compliance and control in organizations (Hackman, 1985 cited in **Jarzabkowski, 2002)**. Through the allocation of resources, some strategic directions are followed to the detriment of others (Jarzabkowski, 2002). Therefore, resource allocation models are a relevant topic of investigation in universities with implications for theory and practice.

Funding modes and funding models not only serve to allocate resources for given ends, they are increasingly being used as governance or management tools in situations where institutions operate in an environment characterized by an absence of competitive elements (Jongbloed, 2008). Funding models and mechanisms can be analyzed through different dimensions; Albrecht and Ziderman (1992) had identified three main criteria: performance-based, cost-based and negotiated. Other dimensions include input-orientation and outcome-orientation (Jongbloed and Koelman, 2000), demand-side and supply-side (Kaiser et al., 2001), performance-basis and unit-cost-basis (Johnstone, 1998), normative Vs contractual models for public funding of universities (Gonzalez Lopez, 2006). From the funding methods discussed above, it has been found that student enrollment (that is input-orientation) is an essential element in many funding models (Cheung, 2003). As almost all institutes receive funding directly from governments or funding agencies, public authorities maintain a strong influence on institutes through funding negotiations and controlling student intake quotas. Block grants are commonly used in many countries, but, according to Cheung, they can only increase the flexibility of internal allocation of funds; they do not provide institutes with enough autonomy to decide their own directions.

The way in which university funding is allocated has undergone extensive change in most countries in the world. The fact to consider here is that different funding mechanisms have different effects in different facets of operations of institutes. Funding mechanisms have a substantial effect on the public resources a higher education institution receives; changes in the funding mechanism therefore will affect the amount of public resources available to individual higher education institutions: some will gain, some will lose (Kaiser, Vossensteyn & Koelman, 2001). Thus, the mechanisms through which governments transfer funds for core activities to higher education institutions have an important effect on the way in which these funds are used (Albrecht & Ziderman, 1995). Many industrialized countries (especially UK and the Netherlands) have made allocation mechanisms a central part of higher education reform over the last decades (Shattock & Rigby, 1983; Barnes & Barr, 1988; Acherman & Brons, 1989 as cited in Albrecht & Ziderman, 1995). Currently, many developing countries are adopting and experimenting with interesting financial reforms of their higher education systems that concern resource allocation. A good point mentioned by Albrecht & Ziderman (1995) with regard to this is

"It will be important to note, however, that there is often a divergence between the way in which resources are supposed to be allocated and the ways in which they are actually transferred. Despite a few instances of reforms, most institutions operate under stringent regulations imposed by governments with regard to enrolment, access to diverse source of finance, and internal allocation."

Funding mechanisms used in higher education vary widely across countries as the procedures for allocating funds to higher education institutions can take several forms. Furthermore, since universities are not a homogenous type in terms of history, structure or purpose, the management of resource allocation models may be different in different institutions (cf. Miller, 1995 as cited in Jarzabkowski, 2002). The resource allocation mechanisms in higher education, thus, concerns basically, not solely, the distribution of the basic funding of teaching and research carried out by the institutions. In this regard, Salmi and Haupman (2006) stated that governments typically provide public support of universities for two principal purposes: (i) to finance the cost of instruction, operations, and investment; and (ii) to pay for the conduct of university-based research including investment in research facilities and equipment. The goal is, according to Jongbloed (2000), to implement transfer mechanisms that provide incentives for institutions to operate efficiently and make the most effective use of scarce funds. Similarly, Jongbloed indicated that the most appropriate system depends to a large extent on political values (what does the government want higher education institutions to do?) and on more economic considerations (how do people/organizations react if they are faced with making choices from a set of alternatives and this choice implies using up part of the limited resources and time available to them?).

According to Jarzabkowski (2002), on the other hand, the degree of centralization and decentralization of resource allocation has specific strategic implications related to strategic direction and locus of control. A *centralized* resource allocation model is defined by Jarzabkowski as one in which resources are authorized and allocated by the senior management team from a central pool on a zero basis. This method of resource allocation permits redeployment of resources in accordance with strategic priorities at the corporate or overarching university level. *Decentralized* resource allocation is defined as departmental control over budgets, with responsibility for their own strategic direction, income-generation and financial viability. In such a model, departments are able to be locally responsive to strategic initiatives within their discipline and to generate, deploy and allocate their own income streams. In the institutional level, internal resource allocation mechanisms in many developed countries are advancing towards more decentralized budgeting mechanisms (Gonzalez Lopez, 2006). These two models are theoretical polarities and it is likely that most universities will operate between the extremes (Jarzabkowski, 2002),

For the sake of classification, however, two general types of allocation mechanisms for tertiary education can be seen that are used in countries around the world. These are *direct allocation mechanisms* and *indirect allocation mechanism* of resource. Those that make resource transfers directly to institutions for the support of recurrent expenses, capital investments, specific purposes, and research are direct allocation mechanisms; while those that indirectly support institutions through resources transfers, vouchers and subsidies provided to students or their families in the form of grants and scholarships, tax benefits, and subsidized loans to defray or delay the cost of tuition fees or related non-educational expenses such as housing, food, and other living expenses are indirect ones (Salmi and Haupman, 2006).

Despite the differentiations among the direct and indirect resource allocation mechanisms, there are basically four types of resource allocation mechanisms (Albrecht and Ziderman, 1995) each with other sub-categories among them. These are:

i. Negotiated funding
ii. Input funding
iii. Output funding
iv. Student-based funding.

The authors have indicated that the first three forms of funding (direct) to institutions be evaluated separately from three perspectives: the extent to which they have promoted or inhibited the stability, the efficiency and responsiveness of institutions. Below is a brief summary of the four funding mechanisms:

i. Negotiated Funding: Here, allocations are based not on objective criteria but on the allocation of previous year and are the outcome of negotiations between representatives of educational institutions and of the government (Jongbloed, 2000). In negotiated funding, decision-making does not depend on specific institutional characteristics (such as number of students enrolled) but much more on political relationships between actors (Albrecht and Ziderman, 1995) that can limit the institutional capacity and internal autonomy. Salmi and Haupman (2006), on the other hand, indicated that negotiations between government and tertiary education institutions are the most traditional way in which the funds for the operations and investment plans of public providers are allocated to individual institutions. The levels of funding decided through the negotiations process, usually primarily based on historical trends, and are then typically distributed to institutions. That is, annual budget decisions tend to reflect historical trends and ensure 'political equity' rather than quality and efficiency (World Bank, 1994). Here, political equity can be understood as a way to raise the *total* number of people who participate in politics and civil society.

Negotiated funding, in general has not been an effective mechanism for allocating higher education resources. It has shortcomings. To mention some of the basic shortcomings described by Albrecht and Ziderman (1995), negotiated funding provides no incentives for efficiency. That is, since funding is unaffected by whether institutions behave efficiently or not, it is tempting for them to continue in established inefficient ways. In addition, this mechanism has not enabled institutions to be adaptive to labor market or student demands.

ii. Input Funding: Here, allocations are made according to measures of the costs of higher education; often, these costs are categorized into staff salaries, material requirements, building maintenance costs, investment, etc (Jongbloed, 2000). Hence, funding is allocated based on educational inputs with objective criteria as opposed to the previous method. There are different types of cost based funding mechanism that include line item budgeting, program budgeting and formula budgeting. Thus, funding in this case, as illustrated by Jongbloed, is either on a *line-item* basis, meaning that each expenditure item has to be approved on the basis of norms, or on the basis of a *formula*, in which a budget is driven from multiplying enrolments or staffing patterns by a parameter of unit cost. Here, it is worth briefly discussing some basic types of Input based funding as these mechanisms are directly related with the problem of the research.

a. Line Item: Line item budget shows the different expenditure items as separate lines of the budget. These line items are determined by referring to norms with respect to indicators such as unit costs (or unit cost rises) or capacity (e.g., funded number of students) (Jongbloed, 2008). This mechanism attends to be regarded as a highly restrictive form of input based funding, where governments require institutions to have each expenditure item approved on the basis of expenditure norms (Albrecht and Ziderman, 1995). The way institutions can spend the public funds they receive from government or state or other public agencies can be highly restricted. This will, in turn, limits the extent to which institutions can reallocate the available budgets to other missions.

b. Funding Formula: It is a procedure used for estimating the appropriate distribution of a government allocation among institutions through the processing of objective data about future programs, student numbers and relationships between programs and costs, sometimes supplemented by subjective judgment, all of this expressed in mathematical terms (Jongbloed). This is, contrary to the first one, the most flexible input funding approach typically based on enrollment or staffing patterns. Formula funding, according to Jongbloed (2000), is the result of applying straightforward rules to the task of deciding which institution should receive what sum of money. Teixeira (2008), on the other hand, indicated that some of the main criteria utilized are the number of registered students, the kind of programs and the subject areas. Hence, formula funding normally includes such elements as overall enrollments and program registration patterns, instructional costs, research, administration and maintenance.

Formula based funding mechanisms present several positive aspects. They allow potentially a more rational (and non political) distributions of funding among higher education institutions and between disciplines; they correct major inefficiencies in the system; help in improving innovativeness and reducing costs (Johnstone, 1998). Similarly, Jongbloed (2000) has presented some advantages of a formula funding:

a) Money is no longer allocated in a primarily discretional manner, but according to certain guidelines, some of which are quantifiable.
b) The process is clear to the institutions concerned and the general public.
c) The roles of the funding authorities and the institutions reinforce accountability
d) Universities, which control admissions, both in general and to particular programs, may engage in more realistic planning.

In general, with all its advantages and strong sides, input based funding is not without weaknesses. Some of the basic consequences of input funding, according to Albrecht and Ziderman (1995), include the problem with input funding on how it related to access policy. That is, if there are no fixed limits on enrollments to the system, the government commitment is theoretically open ended. The second problem is that most input funding mechanisms fail to provide efficiency incentives. Input based funding may encourage high unit costs due either to poor resource utilization or to a high cost per graduate because of students dropout and repetition.

iii. Output Funding: Here, the objective is to allocate funds on the basis of 'payment by results', rewarding institutions according to their success in producing graduates, post-graduates and research (Jongbloed, 2000). Thus, this method is concerned mainly with effectiveness in producing more output, more graduates; that is, being more efficient. A major concern motivating governments to develop output-funding has been the high cost of producing a graduate, due either to institutional inefficiency or to a poor flow of students through the system (Albrecht and Ziderman, 1995). In output funding, while emphasis tends to be on quantity, the quality of output is equally important. The authors also indicated that output funding offers solution to inefficiencies that are caused by low admission standards & poor incentives. However, output funding is not without problems. One of the problems of such funding is to provide incentives that are sufficient to improve performance, but not so much so that university activities are excessively disrupted. In addition, most output funding has evaluated the quantity rather than the quality of output.

iv. Voucher System: This is a system in which funds are channeled via students rather than directly to institutions. Thus, it is an indirect allocation mechanism of funds. Students receive a voucher (usually from the government, although private voucher systems also exist) representing a value in terms of a number of years, months or other units of education (Jongbloed, 2000). Under a pure voucher plan, institutions would be made wholly autonomous in setting fee levels and students would use government provided vouchers, depending on the level of fees set by individual institutions (Albrecht and Ziderman, 1995).

Albrecht and Ziderman has stressed that the central motivation for student-based funding is to promote competition that, in turn, is expected to stimulate efficiency and quality. Moreover, student based funding is also expected to improve the equity of higher education systems by increasing the overall access through stimulating increased provision of educational places. However, this recently introduced, student demand driven funding mechanism is not without limitations. Albrecht and Ziderman presented three problems related with student-based funding. First, a strongly student-driven system could cause a drop in higher education standards. Second, a student-driven system makes less sense in a country where labor markets do not operate smoothly. This is typical for developing countries. Lastly, this mechanism could lead to an undermining of science and other costly fields of study.

In conclusion, the mechanisms through which transfers are made strongly influence the way in which public funds are used. Each allocation mechanism has its own set of incentives, strengths and weaknesses. Negotiated funding is resulted from political links between government and institutions; input and output funding mechanisms utilize criteria of costs to establish annual budgets; whereas in student-based funding, student choice will become a focal point. Jongbloed (2000) summarized that in case of negotiated and input funding, there is almost no encouragement for institutions to be efficient or responsive to changing external demands; both the output-based and student-based funding incorporate incentives for institutions to make the most effective use of scarce funds and to adapt to the labor market and student demands. Thus, according to a report by the World Bank (1994), the criteria used by governments in allocating funding to universities and other institutions should create incentives for these institutions to use scarce funds efficiently.

All in all, it is clear that the available public funds for higher education should be allocated in some way so that money is transferred to institutions for use. That is, how universities distribute their money has greater implication for the proper utilization of the available funds. That is the reason why the discussion of resource allocation here is found to be relevant; not the amount of money distributed but how it is distributed and used. However, on the other hand, especially in the era of reduction of some share of public expenditure, there is a perception of scarcity of public funds for HEIs. As a result of this scarcity of resources, institutions are generating additional resources or revenues to enhance their activities, achieve their missions with excellence and to supplement their publicly allocated inadequate funds. Thus, the next section discusses on revenue or income generation in higher education.

2.3 Revenue Generation in HEIs

In many countries of the world, especially in developing ones, the government is the prime responsible and dominant one for university financing. However, from time to time, public budgets are dwindling so that greater priorities are given to other sectors like primary education, health care, etc. Consequently, financial constraints has predominated higher education finance around the globe as governmental funding to higher education has declined. As a matter of fact, public financing of higher education is clearly becoming insufficient. Universities and colleges throughout the world, especially in developing ones, are struggling to satisfy the ever-growing demand of higher education in the time where public budget is declining creating severe financial constraints. Obviously, insufficient financing of universities and colleges results in loss of best brains, deteriorating conditions for scholarship and research, and hence, the slow development of higher education (Liu, 2007). The already high public expenditures can no longer keep up with the financial demands of continuously expanding higher education systems. However, a university generally requires greater financial resources; it particularly needs discretionary funds (Clark, 1998). Therefore, new financial steering instruments and a diversification of resources are required (Jongbloed, 2008).

The combination of greater financial needs and limited resources have resulted in the development of various alternative hypotheses for financing of the higher education systems (Teixeira, 2008). In Teixeira's terms, the changes in the financing mechanisms accompany the recent trends in higher education, namely the attempt to import market mechanisms to this sector. As the recent expansion of higher education has happened in a context of significant limitations of public funds, the pressure for diversifying the financing sources is increasing significantly. Liu (2007) also indicated that this financial distress created an impetus for governments and institutions to develop various strategies to sustain the expansion of higher education systems. Johnstone (2002) boldly expressed that the classic response to conditions of austerity (financial austerity) in higher education is to combine measures for greater efficiency (for example economies of scale, eliminating duplication, closing low priority operations, increasing both student/faculty and student/staff ratios) with revenue enhancement by diversification.

On the other hand, Bowen (1980) as cited in Hearn (2003) suggested that

> *"Leaders continually seek real funding growth because they operate under a "revenue theory of cost," in which increased revenues are always being sought in order to pursue excellence, prestige, and influence… After all, new money can always contribute to the pursuit of improvement and increased public stature."*

In the above statement, one can understand that searching for new additional revenues should not only be as a result of financial constraints but should also be for the fact that institutions should raise additional money for institutional excellence, enhanced quality and prestige.

Thus, the move towards increased search for non-government sources has become an inevitable agenda of HE in both developing and developed nations of the world. This agenda is key in order to sustain the expansion of HE especially in developing world where the financial capacities of these nations is eminent as compared to the demands for HE and the need for expansion of HE. Therefore, the issue of generating additional revenues for the survival and sustainability of institutions is the order of the day.

2.3.1 Forms of Revenue Generation

Albrecht and Ziderman (1995) provided a broader definition of revenue generation as follows:

> *"Revenue diversification is a broader concept and relates to any form of additional revenue generation; it includes cost-recovery of traditionally supplied services, but also encompasses all forms of income generation from newer, non-traditional activities."*

Thus, funding for higher education should come from diverse sources that will enable to reduce the dependency on a state finance alone. Higher education institutions throughout the world are diversifying their funding bases in many ways. Over the last decade or so, the pressure to expand the revenue base of higher education or diversifying their funding base has been growing. Universities have either taken it upon themselves or have been pressured by governments to expand the financial and resource base as resources have dwindled against mounting enrollments and escalating demand (Tefera and Altbach, 2004). Various forms of ideas to generate revenue and a variety of programs have been experimented with and implemented in many countries of the world.

Hearn (2003) presented non-traditional revenue generating initiatives of American colleges and universities in eight domains: 1) *instructional initiatives*, including retiree-oriented courses, online programming and niche-oriented non degree programming, 2) *research and analysis initiatives*, including technology-transfer initiatives, business partnership, business incubators, research parks and e-commerce initiatives, 3) *pricing initiatives*, including differentiated pricing and unbundling of user fees, 4) *Reforms in financial decision making and management*, including revolving funds, internal cross-subsidization, venture capital investment, as well as participation in arbitrage and options markets, 5) *human resources initiatives*, including compensation incentives for entrepreneurship and retirement or rehiring incentives for faculty, 6) *franchising, licensing, sponsorship, and partnering arrangements with third parties*, including concert series, outsourcing contracts with revenue guarantees, logo-bearing clothing, tours and camps, and event sponsorships, 7) *auxiliary enterprises, facilities, and real estate*, including upgrading athletic facilities, on-campus debit cards, facility rentals, and alumni services, and 8) *development office initiatives*, including appeals to donors abroad and other efforts.

In an analysis given by Liu (2007), it has been indicated that although Hearn's (2003) summary of means to generate nontraditional revenues by higher education institutions is thorough and comprehensive, it is based on an analysis of experiences of colleges and universities in the United States and therefore may not be appropriate to serve as the conceptual framework for a comparative analysis of revenue diversification in transitional societies and developing world. However, a lot of concepts can be learned from Hearn's framework for future strategy even for developing world.

Johnstone (1998), on the other hand, discussed three solutions to financial austerities in higher education: 1) advocating the importance of higher education to get more public revenues, 2) cutting the underlying cost of higher education, and 3) obtaining revenue from alternative sources. On the other hand, Clark (1998) confirmed that third-stream sources, those of industrial firms, local governments, philanthropic foundations, alumni fund raising, represent true financial diversification.

For Johnstone (1998), the remedy of revenue diversification follows from the cost-sharing perspective which views the costs of higher education as shared by five parties: (1) the government or taxpayer; (2) parents through tuition fees or other charges; (3) students also through tuition fees, charges or other costs of living; (4) donors and (5) institutional entrepreneurship the revenue brought in by the sale or lease of university assets, consultancy, research contracts or other income generation. Hence, Johnstone (2002) developed five primary vehicles of non-governmental revenues that enable revenue diversification: (a) the introduction of, or substantial increases in, tuition and full or more nearly full-cost fees into higher education sectors hitherto supported primarily or wholly by public revenues; (b) the introduction of means-tested grants and loans; (c) the encouragement of private higher education supported mainly through tuition fees; (d) the encouragement of entrepreneurial activities on the part of the faculty and/or the university; and (e) the encouragement of philanthropy—for endowment, for direct operations, and for scholarships to students.

In addition to the above vehicles, different forms of diversifying revenue for higher education institutions has been presented by Albrecht and Ziderman (1995) including contracts with industry, commercialization of research, endowment and voluntary contributions; Eicher and Chevaillier (2002) including financing by business, research services for business, income from property, industrial and financial assets and philanthropy as well as sponsors; World Bank (1994) including contract research, short term training courses, philanthropy, alumni, and others.

These different forms of revenue diversification are being practiced highly in a more developed nations' higher education system. Thus, they can serve as 'best practices' for countries where their higher education system is not either very well engaged in or poor in revenue diversification. All in all, the above forms of revenue diversification are of great importance to those university systems in developing countries like Ethiopia where in diversifying their funding base is at its infancy stage despite the fact that universities are even obliged to do so. Actually, revenue diversification is not without limitations. When institutions are implementing different forms of revenue diversification, each method has its own limitation. Thus, it is worth considering the different limitations to overcome the possible challenges that may arise.

2.4 Financial Autonomy in Universities

The discussion of revenue generation implies that universities have the necessary financial autonomy for generating external incomes. Otherwise, it would be very difficult for universities to generate external funds when there is no financial autonomy. Thus, the discussion of financial autonomy here is of paramount importance.

In HE, autonomy is one of the key factors widely regarded as a necessary ingredient for success. In the HEliterature, autonomy at the level of HEIs is referred to as institutional autonomy (Gornitzka & Maassen, 2000; Shattock, 2003). Institutional autonomy implies that the question is about the higher education institutions' autonomy. Institutional autonomy is a fundamental necessity to promote institutional changes and safeguard the freedom of research and teaching among other things.

The institutional autonomy of universities was analyzed by Ashby and Anderson (1966) cited in Kohtamaki (2009) who identified six essential ingredients of an autonomous university that matter most:

1) freedom to select students
2) freedom to recruit staff
3) freedom to set own standards
4) freedom to decide to whom to award degrees
5) freedom to design curriculum
6) freedom to decide how to allocate incomes received from the state or private sources. In this analysis, financial issues are specified in point 6 as freedom to make monetary allocations.

Berdahl (1990), who described autonomy as a power held by institutions and means the power of the institution to determine its own goals and programs, divided institutional autonomy into 1) substantive autonomy and 2) procedural autonomy. Volkwein and Malik (1997) as cited in Kohtamaki (2009), for example, applied substantive autonomy to study autonomy in academic issues and procedural autonomy to study autonomy in administrative issues.

In the context of institutional autonomy, financial issues are located and understood to be one area of institutional autonomy (Kohtamaki, 2009). One element in the category developed by Ashby and Anderson (1966) cited in Kohtamaki focuses on the freedom to decide how to allocate revenue from public and private sources. This view considers allocations of monetary resources. According to Kohtamaki (2009), however, it can be questioned whether the authority to allocate monetary resources reveals all relevant elements of financial autonomy of a higher education institution. One crucial element in financial autonomy is also the authority to raise public and private funds. Both the authorities for raising and using monetary resources are crucial in financial autonomy

Thus, financial autonomy, that combines financial issues and autonomy, is the freedom to the institution to expend the financial resources at its disposal in a prudent way keeping in view its priorities. According to Albrecht and Ziderman (1995), autonomy should also be furthered in many instances with regard to enrolment, internal allocations and the ability to seek additional income. In this case, institutions that are awarded financial autonomy for their internal allocation have the freedom to use their resources as they fit without any prescription and restriction. They will attain greater efficiency as they have the autonomy to redeploy their resources. A good example for this is the use of block grants for universities to allow them to have the autonomy to use the available resources as they fit to the institutional operations instead of line item budgeting, which is restrictive. The notion of financial autonomy also extends to the possibility for universities to generate external funds, from business and industry as well as from tuition fees collected from students participating in continuous professional education (Jongbloed, 2008).

Thus, the existence of autonomy- academic, financial and administrative- has greater implication for institutional effectiveness, efficiency and other important values that can strengthen any organization.

2.5 The Funding of Higher Education in Developing Countries: Issues and Challenges

As the 21st century opens, tertiary education is facing unprecedented challenges, arising from the convergent impacts of globalization, the increasing importance of knowledge as a principal driver of growth, and the information and communication revolution. In response to these momentous and converging trends in the environment, a number of countries have undertaken significant transformations of their tertiary education systems, including changes in patterns of financing and governance, growing institutional differentiation, the creation of evaluation and accreditation mechanisms, curriculum reforms, and technological innovations (World Bank, 2002).

The most fundamental change in higher education systems throughout the world has been the attempt to massify higher education, to democratize access. Rapidly expanding primary and secondary enrolments, increased demands for skilled labor and the growing perception of higher education as a path to individual prosperity have fueled the pressures to expand coverage. During the past thirty years, the impact has been dramatic in developing countries wherein higher education enrolments increased several times (Albrecht & Ziderman, 1995).

In many developing countries, the government dominates in financing and providing education. School enrollments have expanded rapidly in the two decades, reflecting the sustained increases in public spending on education. An analysis of the trend of the share of public expenditure on education in the gross national product during the period 1990–1 (or the nearest year) and 2001–2 (or the nearest year) shows that the government of 83 countries out of the 139 reporting had secured a relative increase in educational expenditure; sixty-two of them are from developing countries out of a total of 94 (Sanyal & Martins, 2006). Thus, developing countries were slightly greater in number in increasing their share of expenditure on education in both gross national product and in the total government expenditure. However, in many developing countries, the share of education in public spending had already become very large - reaching between one-tenth and one-third of the public budget - and it was increasingly difficult to compete for additional public resources (Mingat and Tan, 1996).

If only to reach the world average, the developing countries, thus, will need to expand higher education much faster than ever before. But, the root of the financial crisis in higher education in many developing countries lies in the combination of a dramatic and continuing growth in student numbers unmatched by public expenditures on higher education (Albrecht and Ziderman, 1995). Moreover, the increased number of secondary school graduates as a consequence of the universalization of primary education will also create strong pressure for expansion.

Whatever the reason may be, many of the problems revolving higher education are rooted in a lack of resources especially in developing world like Africa. For example, developing countries spend far less than developed countries on each student. But finding new funds is not easy. Although absolute spending is low, developing countries are already spending a higher proportion of their smaller incomes than the developed world on higher education, with public spending for education growing more quickly than income or total government spending (World Bank, 2000). Thus, while maintaining adequate public funding of higher education is a worldwide problem, it is most pronounced in developing countries (Meek, Teichler & Kearney, 2009).

Most public universities are highly dependent on central governments for their financial resources, with developing country systems heavily dominated by public universities that tend to have low tuition fees, the costs fall predominantly on the state (World Bank, 2000). Financial dependence on the state means that funding levels fluctuate with the ups and downs of government resources, which is typical of developing countries economy. At the same time, their governments underfund universities in the developing world since higher education is clearly placing greater demands on public budget and the public budget is unable to afford all the resources necessary to undertake institutional missions. In addition to being severely underfunded, sometimes despite their best efforts, many higher education institutions in developing countries lack the authority to make key academic, financial, and personnel decisions; they can also be slow to devolve responsibility for decision making to constituent departments (World Bank, 2000). Poor governance, in other words, dilutes their ability to spend what money they have.

This being the case, for any university to effectively perform its activities and roles, their must be adequate funding in the first place; and their must also be effective and efficient system of financial management. However, developing countries (especially Africa) are not able to provide the adequate amount of resource for its higher education because of its low economic capacity, political instability, highly expanding tertiary education, recent cuts in government expenditure and other related factors which all impact the higher education system and its proper functioning.

Tefera and Altbach (2004) stated that African higher education, at the beginning of the new millennium, faces unprecedented challenges. Not only is the demand for access unstoppable, especially in the context of Africa's traditionally low postsecondary attendance levels, but higher education is recognized as a key force for modernization and development. In their argument, one of the key challenge facing African universities is underfunding and lack of adequate resource. The central reality for all African higher education systems at the beginning of the twenty-first century is severe financial crisis. Academe everywhere, even in wealthy industrialized nations, faces fiscal problems, but the magnitude of these problems is greater in Africa than anywhere else. The cause of this severe financial crisis, according to Tefera and Altbach, include:

• *The pressures of expansion and "massification" that have added large numbers of students to most African academic institutions and systems.* There are all the signs that expansion will continue at an accelerating rate in developing countries in HE as in the overall economy (Martin & Sunyal, 2006). This rapid expansion of HE is mandatory for developing countries in order to reach the world average and be active member of the knowledge society. However, this expansion is creating a strong pressure in financing the HE with the very limited capacity of the nations.

• *The economic problems facing many African countries that make it difficult, if not impossible, to provide increased funding for higher education.* It is a well known fact that African continent is underdeveloped economically. This economic challenge is one big factor for the nation nto to increase their financial capacity on their HE system.

• *A changed fiscal climate induced by multilateral lending agencies such as the World Bank and the International Monetary Fund.* African HE is donor-based; the donation basically comes from multilateral agencies like World Bank, IMF, and UNESCO. The active involvement of these agencies is changing the policy and reform climate of the HE system in different parts of the continent.

• *The inability of students to afford the tuition rates necessary for fiscal stability and in some cases an inability to impose tuition fees due to political or other pressure*. As most African countries GDP do not exceed 1 USD, the capacity of the students and even their parents is very limited, challenging countries to consider the use of tuition fees. In addition, some countries, like Tanzania, are providing HE for free due to political reasons. But this is highly challenging the capacity of the state to adequately finance the HE system.

• *Misallocation and poor prioritization of available financial resources, such as the tradition of providing free or highly subsidized accommodations and food to students and maintaining a large and cumbersome non-academic personnel and infrastructure, among others.* In many countries, governments pay stipends and living allowances to students, and this consumes a substantial proportion of university resources. In Guinea, for instance, scholarship money given to students accounts for as much as 55 percent of the total government allocations to the universities (Sylla 2003).

A point to bear here is that not all of these elements are, of course, present in every African country, and financial circumstances vary, but overall, funding issues loom very large in any analysis of African higher education.

The financial crisis and underfunding in African universities can be seen based on the nations annual allocation for their universities institutional expenditures. The total yearly expenditure for higher education in Africa as a whole does not even come close to the endowments of some of the richest universities in the United States (Tefera and Altbach, 2004). The budgets of individual universities in many industrialized countries exceed the entire national budgets for higher education in many African nations. These comparisons clearly illustrate the disparity between the financial situations of higher education institutions in Africa and in industrialized nations.

Johnstone (2002) tried to illustrate some of the consequences of financial austerity an institution, like in Africa, could face. These include: loss of institutional capacity to respond to change; loss of academic, research or other staff, particularly the best staff, lower staff allegiance and morale (due to declining salaries), or loss of much of the time and attention of teachers or researchers as they are forced to 'moonlight' elsewhere to maintain real wages; erosion of equipment, including computers, laboratory equipment and library materials; and deterioration of physical plant, and inability to expand physical capacity to keep up with increasing enrolment.

Looking into the capacity of the nation states in developing countries, especially in Africa, it comes as no surprise, then, that virtually all-African universities suffer from the effects of scarce financial resources. Serious shortages of published materials of books and journals, the lack of basic resources for teaching, the absence of simple laboratory equipment and supplies (such as chemicals) to do research and teaching, and, in some countries, delays of salary payments for months are just some of the common problems faced by institutions across the continent (Tefera and Altbach, 2004). Hence, without exception, although difficult to generalize, African universities are under considerable financial pressure and face serious financial problems with its consequences threatening the future of the institutions. Consequently, most governments of the developing countries receive financial assistance from international financial organizations or friendly countries in the forms of loan, grants, and aid.

Conclusion

In the last two or three decades, numerous changes and reforms with regard to financing higher education have been introduced and implemented; all circulating the issue around reduction of public expenditure, sharing the cost of education (cost sharing), revenue diversification. Following this, different funding mechanisms and non-governmental revenue strategies have been used throughout the world. These financial trends are accompanied by financial scarcity, which is resulted from a reduced public support and the expansion of higher education with an increasing HE enrolment throughout the world, including developing countries like Ethiopia. Then comes the pressure to find complementary resources as a response to reductions in funding by seeking out new sources of revenue. It is clear that this financial scarcity affecting HE has greater implications for developing countries like Ethiopia where there is a very serious financial constraint with an increasing demand for higher education that requires more money than ever before. The search for increased additional revenue, which is the trend of most industrialized countries HEIs, is a case in point in time of financial constraints.

Chapter Three

Higher Education in Ethiopia

HEIs, especially in developing countries, are facing enormous challenges. The central reality for all African higher education systems at the beginning of the 21st century is severe financial crisis. One of the major problems now facing most African universities is the problem of under-funding. In response to this, universities have either taken it upon themselves or have been pressured by governments to expand the financial and resource base as resources have dwindled against mounting enrollments and escalating demand. This under-funding of universities and the move towards search for additional revenue is also the case in Ethiopian HE system. So, now in this chapter, we focus on Ethiopian HE system and this part presents an overview of the country, its educational system, the development of HEIs and current massification, and lastly financing HEIs in Ethiopia.

3.1 Ethiopia: the Country

Ethiopia is a country that has rich historical and cultural tradition that has long captured the imagination of the West. This ancient land, formerly known as *Abyssinia*, is associated in historical legend as the home of the Queen of Sheba in the 10th century BC and it has a Christian tradition that can be traced back to the 4th century AD (Hancock et al, 1983). Twice, in 1896 and 1936, Ethiopia became a focus for anti-imperialist sentiment as it resisted the colonial ambitions of Italy (Zedwie, 1991). Not long ago, the country has suffered from a 16 yearlong brutal civil war and a famine that was globally publicized in 1985 via the international Medias. Popular conceptions of Ethiopia in the West, thus, present a rather confused cocktail of images of an ancient civilization; a proud and independent nation; the Shangri-la of Rastafarianism; a people unable to feed themselves. The reality, of course, is more complex than all of that.

Unique among African countries, the ancient Ethiopian monarchy maintained its freedom from colonial rule with the exception of a short-lived Italian occupation from 1936-41. In 1974, a military junta, the Derg, deposed Emperor Haile Selassie (who had ruled since 1930) and established a Socialist State. Torn by bloody coups, uprisings, wide-scale drought, and massive refugee problems, the Derg regime was finally toppled in 1991 by a coalition of rebel front (EPRDF). A constitution was adopted in 1994, and Ethiopia became parliamentary democratic republic and held its first multiparty election in 1995[1].

Ethiopia, on the other hand, is the second most populous country in Africa, with about 83 million people based on 2008 Population and Housing Census, next to Nigeria. The capital is Addis Ababa. Ethiopia now has a tiered government system consisting of a federal government overseeing ethnically based regions, zones, districts, and neighborhoods. Thus, Ethiopia is divided into nine ethnically based administrative regions: Afar, Amhara, Benshngul-Gumuz, Gambela, Harari, Oromia, Somalia, Southern Nations & Nationalities and Tigrai; and two chartered autonomous cities: Addis Ababa & Dire Dawa.

Economically, Ethiopia has shown a fast-growing annual GDP for the last consecutive five years and it was the fastest-growing non-oil-dependent African nation in 2007 and 2008. Ethiopia's per capita income, however, as estimated in 2007 is USD 220, one of the least in the world. Education shares 22.8% of the country's budget for 2007/2008 (MoE, 2008).

Figure 1: *Political map of Ethiopia adapted from* https://www.cia.gov/library/publications/the-world-factbook/geos/et.html

[1] CIA Fact book retrieved in January 2009.

3.2 Overview of Ethiopian Educational System

Ethiopia has a long and rich history of educational traditions that can be considered as indigenous education and religious education. Indigenous education was offered by all ethnic and linguistic groups and remains an important transmitter of cultural identity from one generation to the next (Ayalew, 1989). However, the Ethiopian Orthodox Church has dominated education in Ethiopia for many centuries until secular education was adopted in the early 1900s. In its long history of existence, church education has served as the main source of civil servants such as judges, governors, scribes, treasures and general administrators (Teshome, 1979). Thus, until the early 1900s, formal education was confined to a system of religious instruction organized and presented under the aegis of the Ethiopian Orthodox Church.

At the beginning of the twentieth century, the education system's failure to meet the needs of people involved in statecraft, diplomacy, commerce, and industry led to the introduction of government-sponsored secular education. Thus came the introduction of modern education in the history of Ethiopia in 1908. The first public school to provide a western style modern education was the Ecole Imperiale Menelik II, which was opened in October 1908 (Fisher and Swindells, 1998). Modern education was, hence, introduced to Ethiopia nearly a century ago. So, this indicates that although Ethiopia has a long history of formal education, it was all confined with church education and secular western style general education was a phenomenon of only the beginning of twenty century. However, the education and training offered during these long years had limited positive impacts on the lives of the people and national development (MoE, 2002). That is, the education offered has not enabled to solve the problems of farmers, pastoralists and change the lives of the overwhelming majority of the people.

During the initial phase of the more planned and coordinated expansion of modern education after 1941, the primary objective of education in Ethiopia had been to produce trained manpower that could run the emergent government bureaucracy (MoE, 2002). Particularly, after 1941, according to MoE, the government's main concern was to replace expatriates that worked at various levels in public offices by Ethiopian nationals. Hence, the narrow and limited scale of formal education that existed, beyond incubating bureaucratic clerks, had hardly any substantial merit. After a certain period grade level, the ambition of the student population was largely to secure government employment. The education of the time nonetheless did little to change trainees' outlook or help them break the cycle of dependency on the government for employment and develop a capacity to create their own jobs in the private sector (Zewdie, 1991).

It is reported that enrolment in primary school in 1991 was only 23% (MoE, 2005a). But, there has been dramatic growth in enrolments throughout the education system in recent years. Aggregate enrolments in Grades 1-12 rose at a steady pace of about 9% a year between 1994/95 and 2003/04, and in grades 1-4, which is the first cycle of primary schooling, it grew even faster at an average of 15% a year (Jeilu, 2008). Thus, currently, the net enrolment rate stands at 83% with an increase also in gender equity (MoE, 2009). With the introduction of the new education and training policy in 1994, the structure of the education system was also changed which comprised of 8 years of primary education (Grades 1-8), 2 years of general secondary education (Grades 9 & 10), and 2 years of upper secondary or higher education preparatory schools (Grades 11 & 12) (FGE, 1994). The primary school is divided into two cycles as first cycle (covering from grades 1-4) and second cycle (covering from grades 5-8). Thus, 4-4-2-2 generally characterizes the pre-tertiary level education system in Ethiopia.

The current education system provides three national examinations: the PSLCE (Primary School Leaving Certificate Examination) taken at the end of second cycle; the EGSECE (Ethiopian General Secondary Education Certificate Examination) taken at the end of Tenth grade and the EHEECE (Ethiopian Higher Education Entrance Certificate Examination) taken at the end of preparatory school. Those students who complete two-year preparatory classes are eligible to join any institute of higher education and field of study in the public universities after they sit for placement examination-the EHEECE (Teshome, 2007).

3.3 The Development of HEIs & the Current Massification in Ethiopia

The history of Western-style higher education in Ethiopia is also a recent phenomenon. According to existing studies and literatures on Ethiopian education, higher education officially commenced with the inauguration of the University College of Addis Ababa in 1950 (Wanna, 2004; Habtamu, 2003).

Practically speaking, according to Teshome (2007), the modern period of higher education commenced with the establishment of the Trinity College with twenty-one students in 1949, with the assistance of Canadian Jesuits. In 1950, tertiary or higher education in Chemistry and Biology were started in the college that was later upgraded to University College at Addis Ababa, the current Addis Ababa University (Teshome, 2007). In the early fifties, Alemaya College of Agriculture and Addis Ababa Commercial College were established. Alemaya was established by the technical cooperation between the Imperial Ethiopian Government and the government of the USA. Gondar Medical College and Jimma College of Agriculture were established in the late 1950's. The University College of Addis Ababa became Hailesilassie I University housed in the old Palace compounds by including Alemaya and Gondar colleges in 1961 then became Addis Ababa University in 1974 after the abolition of the monarchy.

The sixties saw the establishment of Bahir Dar Polytechnic Institute and Kotebe College of Teacher's Education while in the late sixties and early seventies; Bahir Dar Teacher's College, Wendo Genet College of Forestry and Awassa College of Agriculture were established under Addis Ababa University. Several faculties and schools of the university were also opened during this period. Bahir Dar Polytechnic Institute was established with the cooperation of the USSR and Imperial Ethiopian Government in 1963 where as Bahir Dar Teacher's College was established with the cooperation of UNESCO, UNDP and the Imperial Ethiopian Government in 1972. Jimma Institute of Health Science (1983) and Arbaminch Water Technology Institute (1986) were established in the eighties. The nineties saw the establishment of Nazareth (1993), Mekelle (1993), Dilla (1996), Ethiopian Civil Service College (1995) and several regional Teacher training Colleges (Jimma, Awassa, Robe, Gondar, AbyAdi) and Technical Colleges (Maychew) as well as some tertiary level private colleges.

Thus, it can be well understood that the eighties and nineties were the years wherein different colleges and universities began to emerge. Hence, although Ethiopia possesses a 1,700-year tradition of elite education linked to the Orthodox Church (Saint, 2004) as indicated above, higher education started a little over 60 years ago with the establishment of the present Addis Ababa University (Teshome, 2003; Tesfaye, 2006). Its major objectives at that time were to produce and supply qualified and educated schoolteachers and personnel to fill the gaps in the state bureaucracy that had, by and large, been occupied by foreign nationals (Kenaw, 2003).

Between the early 1950s and the mid-1980s, Ethiopia had only two universities and no graduate studies had begun till 1979. During the reign of the Derg, sometime in 1984 Alemaya College of Agriculture, which was part of Addis Ababa University, was elevated to a university, and between the mid 1990s and the turn of the century several universities such as Mekelle, Bahir Dar, Debub, Jimma as well as colleges such as Ambo and the Civil Service College, Addis Ababa College of Commerce were added (Ghelawdewos, 2010) or amalgamated to form universities.

But as the 20th century drew to a close, Ethiopia's higher education system found itself regimented in its management, conservative in its intellectual orientation, limited in its autonomy, short of experienced doctorates among academic staff, concerned about declining educational quality, weak in its research output, and poorly connected with the intellectual currents of the international higher education community (World Bank, 2003). Overall, though higher education in Ethiopia managed to register considerable success until the latter part of the 20th Century (World Bank, 2003), it did not escape the criticism for being elitist. Specifically, it raised a serious doubt as to its survival in the 21st century due to its inability to ensure access, quality, relevance, efficiency, and responsiveness to societal demands at the face of the increasingly globalized knowledge era. Thus, like other African higher institutions, it was felt that there was a need for higher education reform and expansion in Ethiopia (Tesfaye S, 2006).

Recognizing these shortcomings, Ethiopia is currently engaged in a highly ambitious effort to re-align its higher education system in order to contribute more directly to its national strategy for economic growth and poverty reduction (World Bank, 2003). Its achievements over the past five years have been little short of extraordinary. The reforms have targeted all levels: the overall system, the institutions, and the academic programs.

During the past few years, the federal government of Ethiopia has invested significantly in its higher education sector towards increasing access and relevance. A few years ago, there were only two public universities, which were increased to nine in 2004. Recently, the Ethiopian government launched thirteen new public universities plus an open university. Not long ago, there were only six accredited and pre accredited private colleges and universities. Today, their number is more than seventy for diploma and thirty four for degree programs as a result of the government encouraging them to expand in order to assist the government meeting its targets (Rayner, 2006).

With regard to access to higher education, the country's gross enrolment ration was 0.8% in 2000 (World bank, 2003) that places it among the lowest ranking countries in the world. However, the annual intake of students has grown from a bare 6000 to over 36 thousand in the ten years between 1995 and 2005 only in public higher education institutions (MoE, 2005b). And this massive expansion in students' annual intake is alarmingly growing from 2005 onwards. As a result, the student population per 100.000 inhabitants has increased from around 62 in 1995 to over 200 in 2004 currently putting the gross enrolment ratio of the age cohort to be about 4% in 2008 from 0.8% in 2000. However, still gross enrollment ratio is one of the least in the world but with a promising increment.

In addition, private HEIs have proliferated since 1997 and claimed to cover about 24% HE enrolment (MoE, 2003) mainly at diploma level and to a limited extent in their degree programs. The emergence of private HEIs is related with the new regulation of the country that allows the private sector to boom, including education.

Table 1: *Student Enrolment and Annual intake in Ethiopian Higher Education System*

YEAR	Total Enrolment			Annual Undergrad. Intake		
	Both Sexes	FemaleNo	Female %	Both Sexes	Female No.	Female %
1995/96	35,027	7,282	20.8	6,401	813	12.7
1996/97	42,112	8,514	20.2	9,067	1,694	18.6
1997/98	45,554	8,702	19.1	7,612	1,452	19.1
1998/99	52,305	9,769	18.7	9,516	1,452	15.2
1999/00	67,673	16,272	24.1	7,847	1,894	24.1
2000/01	87,431	18,207	20.8	8,884	1,250	14.1
2001/02	101,829	26,894	26.4	13,361	2,517	18.8
2002/03	147,954	37,256	25.2	18,074	3,497	19.3
2003/04	172,111	43,307	25.2	26,556	7,485	28.1
2004/05	187,561	46,328	24.7	31,921	9,635	30.2
2005/06				36,511	9,900	27.1

Source: *MoE, Education Statistics Annual Abstract.*

Note: *1995-2002 intakes include degree and diploma students more or less on equal proportion; while diploma students in 2003 were only 692; there were no diploma students included after the 2004 intake.*

Ethiopia's HE has drastically grown and expanded in the last decade from just 2 universities a decade ago to eight in 2004 and to 22 in 2009. This is a massive expansion that boldly increases the enrollment of students to HEIs. Together, there are around 70 accredited and pre-accredited private colleges and three private university colleges in the country (HERQA, 2008g). However, the gross enrollment rate does not exceed 5% yet. On the other hand, the expansion of the 13 new public universities in the country is made with the mission of providing HE in all regions of Ethiopia- achieving equity and accessibility to higher education based on geographical diversity. This is because Ethiopia is divided into 9 regional federal states, some of them centers and some peripheries. HEIs offered by any institution in Ethiopia may be in 3 programs: regular, distance, and continuing (evening and summer programs). The continuing and distance programs are designed to accommodate those students not admissible through the regular programs. The major clientele of evening programs are either civil servants who intend to upgrade their qualifications or those who have been denied admission to the regular programs, as well as adult learners who seek to improve their education and credentials. Despite the addition of several universities and colleges, however, HE in Ethiopia is not well developed yet. It faces problems associated with the quality and relevance of programs of studies and research, equity, resource constraints, and inefficient resource utilization (Teshome Yizengaw, 2007).

2003 can be considered as a year for all the basic policy debates, changes and reforms in Ethiopian higher education following the formulation and declaration of the Higher Education Proclamation. In 2003, the Ethiopian government introduced the Higher education Proclamation (No. 351/2003) establishing wide-ranging reforms to the higher education system and setting up key agencies to guide and oversee the sector. The reforms, according to HESO (2004), introduced elements of quasi-market in higher education- the introduction of cost sharing, the expansion of private higher education, the move away from state funding of HEIs through the encouragement of income generation activity, a move from extreme centralization to institutional autonomy, the rapid expansion of HEIs to guarantee access and equity, the establishment of key agencies for the sector- QRAA (quality and relevance assurance agency) and HESC (higher education strategic center).

Following the proclamation, which granted private sectors the right to open private colleges and institutions, private HEIs flourished in the country than ever before. Cost sharing has been implemented as it is stipulated on the proclamation. Quality assurance agencies at institutional as well as national level have been established and are conducting their institutional audit basically in private higher education institutions. The reforms introduces the shift from line item budgeting to block grant as line item budgeting is increasingly complicated as systems grow and become more complex (HESO, 2004). ICT has also been widely introduced and began to be used as a means to enhance teaching learning as well as organization activities. Access to higher education has increased as a result of expansion of HEIs throughout the country from about 35,000 in 1995/6 to about 190,000 in 2005 (MoE, 2006).

3.4 Financing HEIs in Ethiopia

Higher education in Ethiopia was and is funded by government in a line item basis. Until 2004, where the first reform in higher education following the Higher Education Proclamation of 2003, the introduction of cost sharing in the form of graduates' tax, financing higher education was totally the responsibility of the government. Despite the introduction of cost sharing which requires students to cover up to 15% of their educational expenses, 85% of the public higher education expenses and tuition fee is highly financed by the central government.

Ethiopia spends about 2.8 percent of its GDP on education. This is lower than the average of 3.9 percent for Sub-Saharan Africa. According to Teshome (2005), the annual budget allocation to the education sector has increased over the past few years, from 176 million USD in 1997 to 353 million USD in 2003. Of the total education budget, on average 15-20 percent is allocated to higher education. In real terms, the current budget has increased from around 10 million USD in 1996 to over 60 million USD in 2004. In addition, the capital budget investment for higher education in Ethiopia has increased from less than ~8 million USD in 1996 to over 90 million USD in 2004.

Table 2: *Recurrent Budget Allocated for HEIs under Ministry of Education*

Year	Recurrent Budget		Proportion that goes to salary (%)
	In Ethiopia Birr	In USD (1USD=8.5Birr)	
1995/96	88,363,082	10,395,656	59.4
1996/97	113,774,900	13,385,282	57.7
1997/98	144,434,400	16,992,282	54.1
1998/99	198,659,200	23,371,670	42.4
1999/00	235,158,300	27,665,682	39.5
2000/01	254,867,700	29,984,435	46.3
2001/02	328,480,300	38,644,741	31.6
2002/03	443,781,700	52,209,611	29.4
2003/04	510,434,300	60,051,094	31.6

Source: *MoE (2005), Education Annual Abstract*

The budget allocation for HE will be about 25 percent of the total education budget, and primary education will account for 54.8 percent (MOE, 2005). Accordingly, for the planned period of 2005-2010, a total budget of over 1.52 Billion USD (1.1 billion USD for recurrent and 482 million USD for capital) is earmarked for the HE sector.

When looking into the funding mechanism in Ethiopia, higher education was funded on line item basis; that is, higher education institutions develop their annual budget plans for the coming year and deliver it to Ministry of Education, as higher education institutions in Ethiopia are under the direct auspices of the Ministry. Then they will send their university representative to the ministry to make negotiations. One serious disadvantage of this funding mechanism has been because universities were not allowed to keep their unutilized funds and transfer them for another fiscal year; they usually make unnecessary expenditures towards the end of the fiscal year (Tilahun, 2009). However, as the higher education system in Ethiopia is rapidly expanding, it has become evident that line-by-line item negotiations of higher education institutions budget would become impractical and inefficient; a rational, fair, efficient and effective system of allocation was needed (Merisotis, 2003).

A funding formula based on student outcomes was seen as being consistent with a new focus on institutional autonomy and accountability and with the need to allocate funding on the basis of achievement rather than inputs. It was also seen as a way to promote improved performance within the context of the rapid expansion of the higher education sector. The Ethiopian Higher Education Proclamation, hence, called for the introduction of a block grant approach for the funding of the higher education institutions in Ethiopia as part of this modernizing agenda. The development of a fair, effective and efficient funding formula for deciding on the individual block grants was, therefore, an inevitable prerequisite for this to happen.

The first attempt to develop a funding formula was made in 2003 through a study commissioned by the Ministry of Education (Ashkroft, 2008), which produced the first draft funding formula- MoE Report (2003). Ethiopian experts who took several factors into consideration prepared this draft formula. Following this study, the Ministry of Education and the World Bank commissioned a follow-up study to evaluate the draft formula developed by the Ethiopian experts. Next, a desk study - Merisotis Report - was conducted using an international expert in Washington, D.C. Merisotis (2003) indicated that the Funding Formula developed by the Ethiopian experts would be complex and difficult to implement, and suggested to draft a simpler and more workable Funding Formula.

In the newly revised and proclaimed policy document- the Higher Education Proclamation No. 650/2009, the federal government or each regional state through block grant system based on strategic plan agreement shall fund public institutions. This indicates that every public institution shall receive a block-grant budget, agreed upon in advance as indicative budget for a five-year period; provided however, that such block-grant budget shall be revised annually.

The new proclamation posits the university president at the center of financial management. Article 64 of the same proclamation states that the president of a public institution shall conduct the financial affairs of the institution in accordance with the law and with the principles of efficiency, efficacy, frugality and transparency. However, it is up to the institutions to design and implement ways of achieving the above principles as the proclamation does not say anything in this regard.

Thus, despite the provision of the Higher Education Proclamation for a block grant funding based on formula, the Funding Formula is still under study to develop an implementation strategy, and line item budgeting has sustained. This all concern about the public higher education institutions in the country not the private ones as the private HEIs in Ethiopia receive no fund from the government other than tax exemption.

As part of financing higher education, cost sharing in HEIs in Ethiopia is a new phenomenon that began in 2003. Thus, a brief discussion of it is found to be important to give highlight about why and how cost sharing is underway in Ethiopian HE system.

The five-year (2005-2010) education sector development program (MOE, 2005) indicates that the higher education system in Ethiopia should be moving towards increasing participation to over 5 percent. However, covering the full tuition and room and board costs for such a small proportion of the age cohort with taxpayer money is neither feasible nor an appropriate and equitable distribution of resources. The need for more public investment to expand access, the need to redress the payment of inequitable subsidies by taxpayers to a small, and mainly privileged, proportion of the age cohort and the desire to diversify revenue, therefore necessitated the introduction of cost sharing in Ethiopia (Teshome, 2006). This indicates that the burden of higher education costs as is in worldwide is shifted from the government or taxpayers to students and families (Johnstone, 2006).

The rationale for using or introducing cost sharing in Ethiopia emanates from the rationales put by Johnstone (2006a). In his analysis, Johnstone explained three principal causes or rationales behind cost sharing: the first rationale is the sheer need for other-than-governmental revenues; the second is the notion of equity- the view that those who benefit should at least share in the costs; and the third rationale is the neo-liberal economic notion that tuition brings to higher education some of the virtues of the market like greater efficiency. Thus, following the increased demand for higher education in Ethiopia, which is a function of demographic increase in the traditional age cohort, public budget alone could not accommodate the demand in the long run. Cost sharing has been introduced in 2003 which enables to mobilize alternative non-governmental sources to supplement revenue, ensures equitable use of public resources, and facilitates the expansion of the sector thereby opening up more opportunities for access. All in all, as is the case in many other countries that implement cost sharing, the major reasons for the introduction of cost sharing in Ethiopia include:

- To supplement revenues as alternative non-governmental source
- To address equity vis-à-vis opportunity to higher education
- To maintain and enhance access to higher education opportunities
- To make students 'customers-like'.

In 2003, Ethiopia has chosen to implement a modified model of the Australian type of deferred student loan scheme in the form of *Graduate Tax* by which students became responsible for covering their full costs of food and lodging plus a minimum of 15 percent of the total instructional costs for their university program (FDRE, 2003b). All enrolled students are eligible to enter into an agreement with the government that stipulates their responsibility for repayment of these costs and the terms that are in effect. Borrowers must begin repayment after a one-year grace period following the completion of higher education and must complete repayment within 15 years. Students also have the option of paying the calculated amount up-front at a 5 percent discount.

The construct of cost-sharing, as elaborated by Johnstone (1986, 1999, 2002, 2003, 2004a) in Johnstone (2006b), posits that all of the costs of higher education, including the institutionally borne plus the privately borne costs of instruction as well as costs of food, lodging and other expenses of student living, are borne by 4 principal parties: governments or taxpayers, parents, students and philanthropists. Hence this principle of cost sharing wherein the costs are to be borne by these four parties is the case in point in Ethiopia.

Income Generation: Despite the fact that HEIs in Ethiopia are not fully engaged in and not well developed in generating external funds and diversifying their funding base, they are required by the law that they have to be strong and fully engaged with this regard. It is indicated in the Higher Education Proclamation No. 650/2009 that any public institution may establish income-generating enterprise upon the request of the president and approval by the board. The proclamation prescribes that the income generation enterprise may have the following sources:

a. income generated from the services it renders and the activities it carries out
b. voluntary contributions made by the staff of the institution
c. donations
d. other lawful sources of income

Together with this, the policy document assures that any public institution shall be free to use its income as it sees fit, in accordance with its approved business plan. However, it is demanded that the financial statements of the enterprise shall be submitted to the university board within six months from the end of the fiscal year. The reality with regard to income generation, however, is not interesting as public institutions are poor with regard to income generation and diversifying their funding base as compared to private HEIs in Ethiopia (HESO, 2004).

Conclusion

Ethiopian HE history does not go beyond 60 years since the establishment of Addis Ababa University College. However, higher education has expanded in the seventies and eighties but not more than the late nineties and the last eight years, which show the massive expansion of higher education in the country with greater increase in enrollment. Currently, the expansion is enormous in Ethiopia as the government is trying to expand access in all regions. Despite the addition of several universities and colleges and the implementation of reforms, however, higher education in Ethiopia is not well developed. It faces problems associated with the quality and relevance of programs of studies and research, equity, resource/financial constraints, and inefficient resource utilization (Teshome Yizengaw, 2007). Thus financial austerity is one among the serious problems. It is clear that with limited government capacity and increased demand for HE in the country, the financial scarcity is becoming serious. Universities are, as a result, required to find additional external resources. However, public universities in the country are found to be weak in revenue generation (HESO, 2004). Hence, this serious financial scarcity together with HEIs weak culture of finding additional resources obviously affects the missions and activities of the HEIs.

Chapter Four

Research Methodology and Design

This chapter deals with the research methodology followed in conducting the study; that is, it describes the nature and size of the respondents, the tools, and the procedures that has been used in this study. It also explains the justifications for adopting the specific methods and perspectives to collect and analyze the data and the strengths and weaknesses associated in this approach. Research design is viewed as overall planning and preparing the methodological procedures for obtaining the intended knowledge (Kvale, 1996). Accordingly, the chapter starts with the discussion for the rationale of the appropriate research methodology- qualitative and the associated research design selected for this study- case study. It presents substantiated reasons for the choice of the qualitative case study, and explains the data collection procedures and tools (document analysis and Interview). Lastly, discussing the method of data analysis concludes the chapter.

4.1 Methodology

Success in scientific research depends on the careful and detailed planning, selection and development of the data-gathering instruments strategy that will enable to provide accurate and insightful facts with respect to the research problem to be studied. Hence, in order to investigate deeply the financial constraints, their impacts on institutional operations, the way the university is trying to diversify its funding base, case study qualitative research approach was used. This is because qualitative methods allow the researcher to explore better the field of the research by making a detailed and more in-depth look of the whole topic. Thus, the researcher intended to elicit first hand information from the respondents and generate in-depth and detailed data through words rather than statistical explanations (Bryman, 2004) that would enhance to effectively examine the objective of the study and give bases for future further study in the area in a more generalizable manner. Moreover, contexts, processes and interactions would require examination, therefore the qualitative approach, affirmed by Glaser & Strauss (1967) cited in Marshal & Rossman (1989) as offering "sensitivity in picking up everyday facts about social structures social systems" seems the most logical approach in this study.

According to Bless and Higson-Smith (1995), the case study is used "as a way of organizing social data and looking at individuals, a small group of participants, or a group as a whole." Creswell (2003), on the one hand, maintains that, in a case study "the researcher explores in depth a program, an event, an activity, a process or one or more individuals."

This qualitative case study is an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources. This ensures that the issue is not explored through one lens, but rather a variety of lenses, which allows for multiple facets of the phenomenon to be revealed and understood. (Baxter & Jack, 2008). In line with this Merriam (1998), on the other hand, provides a clear justification for the use of case study design by stating that

> *To gain an in depth understanding of the situation and meaning for those involved; the interest is in process rather than outcome, in context rather than a specific variable, in discovery rather than confirmation. Insights gleaned from case studies can directly influence policy, practice and future research.*

Thus, case study emphasizes detailed contextual analysis and examine a topic in which there has been little previous research and designed to stimulate further inquiry. Therefore, the case study method in this study helps the researcher to have an in depth understanding of the situation involved and to come up with rich descriptions of diverse circumstances that needs full exploration and discussion. Moreover, the choice of case study in this research is appropriate in that the method is a powerful tool to answer the how questions (Yin, 2003) which is the case in all the interviews and an in depth insight into the research questions and the research problem.

Qualitative studies rely on four basic methods for gathering information: participation in the setting; observation; interviewing; analyzing documents and material culture that vary within each other as well (Marshall & Rossman, 1989). Hence, both document analysis and interview are basically applied in this study. The reason for this is because in the first place, the research problem to be studied is policy issue that is presented in the form of policy document. And, it is more appropriate in this case to use the policy document and analyse it in the form of *document analysis* to get some meaningful explanation of the problem. In addition to this, the researcher believes almost all of the literatures used for this thesis are researches that entirely or basically focus on qualitative presentation of the problem area. Moreover, what is not included or found on the document is gathered by using in- depth semi- structured interview with key informants. The interview guide is the basic tool in this study as it is used to gather data about implementation of the policy issues, the actual financial situation of the case study institution and all relevant information.

Before gathering the necessary data using appropriate methods, the researcher had to secure the willingness of the respondents, as almost all of the proposed respondents are quite high up in the university hierarchy. In this regard, the researcher secured the agreement of the sample respondents to be interviewed. After all this, the researcher gathered data based on the schedule.

4.2 Data Collection Tools

The data collection tools used in this study were both document analysis and semi structured interview guides. Detail explanation of the methods, why they are used and how they are used is presented in the following sections.

4.2.1 Document Analysis

Document analysis, a potential source of data for many qualitative researches, was applied to complement with the interviews. According to Bryman (2004), a definition of a document in research context is seen as any written material that can be read, have not been produced specifically for the purpose of social research, are preserved so that they become available for analysis and are relevant to the concerns of a social researcher. Documents that are used for research purposes can be text- based as well as non- text-based documents (Mason, 1996). The rationale behind using a document analysis, according to Mason, is that written words, texts, documents, records, visual or special phenomena, etc are meaningful constituents of the social world in themselves and provide or count as evidence of these ontological properties. Moreover, data a researcher is interested in may not be available in other forms other than documents; can also be used alongside other methods. Thus, the same reason applies to this study.

In document analysis, the value and their usefulness is likely based on their stability, in that they can be reviewed repeatedly and validate information obtained from other sources (Yin, 2003), which can be invaluable to competent qualitative researchers. Hence, documents are obviously prepared to serve many purposes. However, the document analysis in this study focused on those issues of the documents that are directly relevant with the research problem area. The documents analyzed in this study were national annual budget document of Ministry of Finance and Economic Development (MoFED), the Higher Education Proclamation No. 351/2003 and BDU's institutional expenditure documents from the Office of Finance, Budget and Plan.

These documents were selected because in the first place, the annual budget document of MoFED illustrates the amount of money each university requested for the upcoming year and the amount of money allocated for all the universities. This budget enables to understand how much funding gap exists among each institution. The Higher Education Proclamation No. 351/2003 is the basic document that helped to see the different issues of financing university and the rules and grounds for revenue generation and institutional autonomy. This enabled to see to what extent the policies outlined on the proclamation were implemented especially with regard to funding. Lastly, BUD's institutional expenditure document helped to examine the case study university's budget distribution among different faculties and for different missions (like teaching learning, research, etc).

According to Scott (1990) the documents to be reviewed in research need to be authentic (genuine), credible (free from error and distortion), representative (typical) and meaningful (clear and comprehensive). The above documents are policy documents, national as well as institutional budget documents, which are authentic and credible; and also representative of the issue to be studies in a very meaningful and comprehensive manner. Hence, the documents meet the standard criteria mentioned above which is set for a document analysis.

4.2.2 Interview

In this study, in-depth semi-structured interview questions were the major means of data gathering instrument used for all respondents. Interview method was opted to basing on its many advantages particularly that it allows verbal and non-verbal ways of delivering and receiving information and it allows an interviewer and interviewee to discuss an issue in detail and wider perspectives (Patton, 2002). Moreover, an interview is a useful way to get large amount of data quickly; when more than one person is used as an informant, the interview process allows for a wide variety of information and a large number of subjects (Marshall and Rossman, 1989). It also allows for immediate follow up questions and a guard against confusing questionnaire items; that is, if the respondents clearly misunderstands the intent of the questions or do not understand it, the interviewer can clarify matters, thereby obtaining relevant responses (Babie, 2007). In addition, the presence of an interviewer in an interview generally decreases the number of “don’t knows” and “no answers.” However, with all its strengths, interviews have weaknesses. According to Marshall & Rossman (1989), interviews must involve personal interaction; cooperation is essential. Interviewees may not be willing to share all the information that is needed with the interviewer. The interviewer may not ask appropriate questions because of lack experience, expertise or familiarity with technical jargon. When interviews are used alone, distortions in data are more likely, as interviewers may interject personal biases. Finally, volumes of data may be obtained through interviewing, but such data may be difficult to manipulate. However, despite the limitation it has in gathering data, interview method is preferred in this study for its potential to obtain in-depth information of the problem area, its flexibility in using the method, and the benefits obtained from the presence of the interviewer in gathering data.

The interview questions of the study focused on the major problem areas of the research; thus, the questions addressed issues related with financial constraints in the university, the effects of the financial constraints, the way the university responds to this and revenue generation mechanisms of the university. Consequently, the interview was organized into sub- topics under resource allocation, financial constraint, revenue generation and general questions about research funding in Ethiopian context in order to cover in the discussion during the interview.

Respondents of the interview were 7 in number all in top positions of the university, representing their university and their faculties or colleges. The respondents were categorized into two forms: those who are at the very top management level and those who are deans of faculties. The first groups of interviewees were the ex-vice president for academic affairs, associate vice president for budget, plan and finance, associate vice president for income generation and resource mobilization, and associate vice president for schools of engineering and technology. The second groups were the deans: dean of faculty of business and economics, dean of school of law and dean of college of natural science.

Becher and Kogan (1992) indicated that the levels in HE organization are designed to indicate the discrete clusters of norms and operations, which differentiate one stratum of the organization from the other. Besides, the condition for a particular organizational category of groups to form a level is that it has a distinctive value set and sufficient authority to promote it. Accordingly, Becher and Kogan distinguished between 4 levels in the structure of any higher education: *the central level* (involving the various authorities charged with overall planning, resource allocation and monitoring of standards), *the individual institution* (defined by law through its instruments of governance and by convention through its various decision making bodies), *the basic unit* (which corresponds with subject-based departments or school of study or a course team) and lastly *individuals* (teaching and research staffs, administrators, ancillary workers and students). Thus, the above respondents, which can be considered as those found in the second and third levels, were selected for this study because these officials are the ones who are involved in the entire operations of the funding issues of the university in general and the faculties in particular. These officials are the ones responsible for the management and proper distribution of the available funds of the university based on institutional criteria. Moreover, the planning and implementation of different researches, projects, and revenue diversification initiatives that come from academic staffs, in one way or another, requires the acceptance and decision of these officials in different sectors of the university. Thus, the researcher believed that the respondents were the relevant ones to gather the necessary information for this problem area.

The interview questions were designed and prepared in English. However, for easy conversation and detailed questioning as well as detailed responses, the researcher translated the questions into Amharic (Ethiopia's official language). Then the tape recording was made in Amharic and later transcribed and translated into English once again during analysis.

4.3 Methods of Data Analysis

The data was gathered using qualitative methods of document analysis and semi-structured interviews in the case study university. Thus, qualitative analysis was made using appropriate models. Data analysis is the process of bringing order, structure and meaning to the mass of collected data (Marshall & Rossman, 1989). It is a messy, ambiguous, time consuming, creative and fascinating process. Qualitative data analysis is a search for general statements about relationships among categories of data; it builds grounded theory (Marshall & Rossman).

Henning *et al.* (2004) state that, the true test of a competent qualitative researcher comes in the analysis of the data, a process that requires analytical craftsmanship and the ability to capture understanding of the data in writing. Besides, for the analysis and composition of qualitative data, Patton (2002) puts it: no absolute rules exist except perhaps this: Do your very best with your full intellect to fairly represent the data and communicate what the data reveal given the purpose of the study. In this regard, the first step in qualitative analysis is to develop thorough and comprehensive descriptions of the phenomenon under study (Dey, 1993). This is because description lays basis for analysis. Thus, through analysis, we can obtain a fresh view of our data. In the analysis of this study, the collected data are classified based on themes so that comprehensive description for analysis is presented. One advantage of qualitative analysis of such kind is that it often aims to provide 'thorough' descriptions (Dey, 1993). Thus, the method enables to have a comprehensive and thorough analysis of the topic under study.

Kvale (1996) suggest several main approaches to qualitative data analysis: categorization of meaning, structuring of meaning through narratives (descriptions and quotations), interpretation of meaning and ad hoc methods for generating meaning. Meaning categorization is about reducing long statements to simple categories. The interpretation of meaning means to go beyond what is directly said to work out structures and relations of meaning not immediately apparent in a text; and this requires a certain distance from what is said, which is achieved by a methodical or theoretical stance, recontextualising what is said in a specific conceptual context. The ad hoc approach to generating meaning can be defined as a variety of commonsense approaches to the text under analysis, as well as sophisticated textual or quantitative methods, can be used to bring out the meanings of different parts of the material.

In the study, the data collected through in-depth interview was tape-recorded and transcribed accurately after listening time and again. Short notes were also taken during the interview where tape-recording could not be possible. Then, full account of the story was written just after the interview and the analyzed documents. The collected data were categorized in a meaningful link with the research questions. Therefore, the above approaches of analysis mentioned by Kvale (1996) were used in a combined manner where appropriate.

Conclusion

This chapter dealt about the research design and methodology. To answer the research questions of the study, qualitative approach using single case study was opted as the appropriate method for the topic under study. The research tools were in interview guide and document analysis, provided with the justifications for using the tools, their strengths and weaknesses. First hand data was collected from 7 selected respondents and three official documents relevant with the problem area. Following the methodology and data collection tools, a brief discussion of how to analyze the data is presented ay last. The following part presents the analysis and discussion of the study.

Chapter Five

Data Presentation, Analysis & Discussion

This chapter deals with the presentation, analysis and discussion of the gathered data using the qualitative methods of both document analysis and semi structured interview questions. The presentation and analysis of the findings are done in five sections based on the objectives of the study and the focal themes of the questions in the interview guide. Hence, the sections talk about the findings with regard to funding and resource allocation at system level, financial problems at institutional level, research fund, pressures of income generation and impacts of the financial contexts.

In presenting the findings, much focus is given to the problem areas and the research questions or focal points of the study both in the documents and in the interview guides. Thus, not all contents of the documents and issues discussed in the interviews are included in the presentation and analysis of the findings; rather only those issues that are directly relevant or most relevant to the objectives and research questions of the study are included and discussed.

Therefore, the sections are organized based on the basic questions of the research raised in chapter one and based on the interview questions in the interview guide. Following the analysis and interpretation of the data, the findings or results of the study together with the conclusion as well as some suggestions are presented in the last part of the research.

5.1 The Research Setting

5.1.1 Overview of Bahir Dar & Bahir Dar University

Bahir Dar (Amharic: "*sea shore*") is a city in North Western Ethiopia, and the capital of the Amhara National Regional State. Bahir Dar is situated on the southern shore of Lake Tana, the source of the Blue Nile (or *Abay*). The city is located approximately 578 km north-northwest of Addis Ababa. Bahir Dar is one of the leading tourist destinations in Ethiopia with a variety of attractions in the nearby Lake Tana and Blue Nile. The city is distinctly known for its wide avenues lined with palm trees and a variety of colorful flowers. It is also considered as one of the most beautiful, well planned, and safest cities by many standards, and in 2002 it was awarded *UNESCO Cities for Peace Prize* for managing to address the challenges of rapid urbanization (UNESCO, 2002).

Bahir Dar University is a university located in Bahir Dar city. Bahir Dar University was created from the merger of two former higher institutions. The first was *Bahir Dar Polytechnic Institute*, which formed one of the faculties of the University, was established in 1963 under the technical cooperation between the Government of USSR and the Imperial Government of Ethiopia. The objective of the institute was to train skilled technicians in the fields of Agro-Mechanics, Industrial Chemistry and Metal, Textile, Electrical and Wood Technologies until the commencement of the Engineering degree program in 1996. The other institution of higher learning was *Bahir Dar Teachers College*, which had been established more than three decades ago. Its original name was the Academy of Pedagogy, and it was created in 1972 by the tripartite agreement of the Imperial Government, UNESCO, and UNDP and started actual work in the following year under the auspices of the Ministry of Education and Fine Arts. Its general objective was to train multipurpose primary education professionals capable of adopting primary education to rural life and rural development (BDU Profile, 2006).

The two institutions were upgraded through time from diploma to degree level and integrated into Bahir Dar University following the Council of Ministers Regulation No. 60/1999. The University was inaugurated on May 6, 2000, and the Polytechnic Institute and the Teachers College became the Faculty of Engineering and Faculty of Education, respectively.

Later, the university added two more faculties, that of Business and Economics and the faculty of Law, which were established in 2001 and 2003 respectively. Bahir Dar University was officially inaugurated in May 2001. The University was again expanded and opened new faculties that included Agriculture and Environmental Sciences (2006), Medicine and Health Science (2007), Land Management (2007).

Currently, BDU is reorganized in its structure and consists of 4 colleges, 3 faculties, 5 schools and 2 institutes with a total of 34 departments in its three campuses, which makes it one of the very few comprehensive multi-campus universities in Ethiopia. Its programs include regular and continuing education providing both undergraduate as well as graduate level degrees. The continuing education program offers education in three different modes: in the evening, in the summer (kiremt) and in the distance-learning program. In 2005/06, the university had a total of 27,902 students enrolled in all of its programs and a total of 674 and 1,180 academic and administrative staffs respectively (BDU Profile, 2006). However, currently, 45, 160 are enrolled in all the programs in 2009/10.

Table 3: *Total Number of BDU Students in 2009/10*

Program attended	Male	Female	Total Number
Regular Undergraduate	11,256	4,472	15,728
Regular Graduate	1,029	79	1,108
Continuing Education	4,304	1,194	5,598
Summer Education	4,513	1,380	5,893
Distance Education	11,151	5,682	16,833
Total Number of Students	32,253	12,907	45,160

The university is staffed with around 1,125 teachers and technical assistant staffs and 1,302 administrative and support staffs.

Table 4: *Current Profile and Number of Academic & Technical Assistant Staffs in 2009/10*

	Male	Female	Total
Diploma	103	19	122
Degree	352	59	411
Masters	482	43	525
MD	20	2	22
Ph.D.	43	2	45
Total	1,000	125	1,125

The university has a vision of becoming a *"Centre of Excellence for Community Focused, Practical and Democratic Training, learning and Research*". Like all other universities in Ethiopia, the HE Proclamation No.351/2003 (which is also modified as HE Proclamation No. 650/2009) governs BDU. It has a university Legislation adopted in 2005, which gives the university the autonomy for its internal administration. For more institutional administrative details, below is presented the organizational structure of the university.

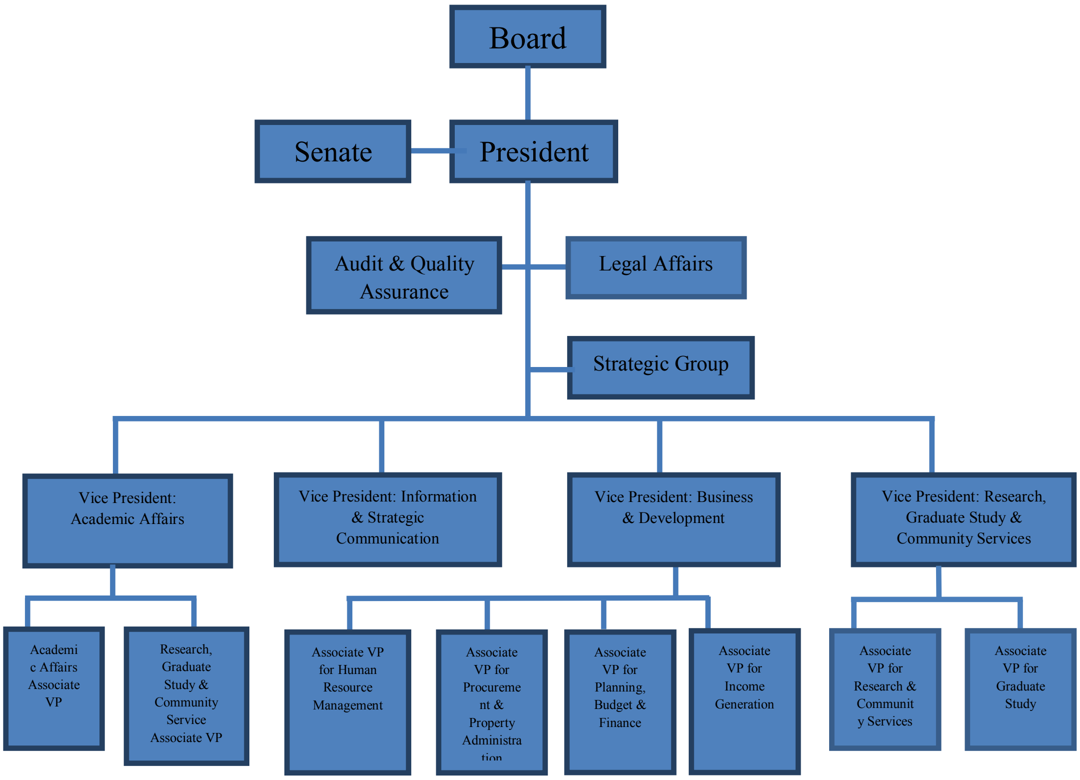

Figure 2: *BDU Organizational Chart*

Following is the analysis and discussion of the data collected based on themes categorised.

5.2 Funding and Resource Allocation Issues at System Level

The resource allocation mechanism that is presented in this study for this specific university represents the national view of public higher education in Ethiopia in general. That is, despite the fact that the Higher Education Proclamation No. 351/2003 assures the use of block grant in the form of formula funding as of 2005, this is not yet implemented. Hence, the resource allocation mechanism employed currently in Ethiopian public higher education institutions is line item budget.

In the process of budget allocation, according to associate vice president for funding, budget & plan, government has plans and points to consider: the state has development plans; the state considers the amount of money it can collect through taxes; and also the amount of money that can be obtained from donor organizations and loans. Apart from this, the government also considers domestic loans if budget is to some extent low. Thus, the government is doing some sort of balancing the incomes (tax, loan, donations) and development plans. Then after this, the government puts the maximum limit for budget request for all institutions. And institutions will prepare their own budget proposal and send it to Ministry of Education (MoE) and Ministry of Finance and Economic Development (MoFED); these two ministerial offices are the ones responsible for the overall controlling and allocation of higher education budget in the country.

It appears that in this budget allocation by central government, there is a maximum budget limit set by the government at national level that institutions are expected to request. Universities, thus, prepare budget plan for the next year based on that maximum limit. At institutional level, each department prepares a budget plan and all is collected at faculty level; that is, department heads submit their budget plans to their faculty and college deans. After a slight discussion, deans of each faculty presented the plans to university officials. Then, Finance representatives and vice presidents of the university present the total university budget plan for the upcoming year to MoE and MoFED. In here, there is defense that institutions can defend and negotiate about the amount decided to them to raise it. The budget plan is prepared in a detailed manner indicating each aspect of the budget request and budget title and what amount is needed for what activity in detail. Therefore, in the resource allocation by the central government, one can see a mix of the use of line item budgeting mechanist with that of negotiated funding.

According to the ex-vice president for academic affairs, it was understood that when universities request budget from central government, it is not a well-planned system they are using. They simply copy the previous years' documents that were used to request budgets. This is a case at least in BDU. Exception here is only salary. When requesting salaries, it is not associated with activities and institutional operations rather only with the total number of academic staffs. In addition, the vice president added that institutions, especially at faculty and department levels, mostly lag when they are asked to prepare their budget on time; they don't prepare any financial plans beforehand. The associate vice president for finance, budget and plan confirms that some faculties get additional budget for overload but others do not get only because they do not have it in their plan or they do not prepare plans beforehand.

From the total budget, around 40% is allocated for salaries. According to a World Bank (2003) report, budgetary analysis carried out during the recent Public Expenditure Review indicates that Ethiopian universities have spent approximately 40% of their budgets on salaries since 2000/2001. It is noteworthy that the salary share in institutional budgets has evolved favorably downwards from its 59% share in 1995/96. The associate vice president for engineering faculty stated that from the remaining 60%, there are payments for services like electricity, water and telephone, which accounts for about 10% of the budget. The payment is similar to salary, as it does not have any bureaucracy. So, the associate vice president emphasized that we have to talk about the appropriate utilization of the remaining 50% of the annual gross budget. This remaining 50% is spent for the purchasing of different materials and facilities. However, from this 50%, he indicated that there is a trend of budget flow back as we are not utilizing it efficiently and effectively. The associate vice president even explained this by raising a question: When you ask is this budget flowing back because the university mission for this year is achieved? The answer is no, the university didn't achieve. However, the fact as it has been examined in the HESO (2004) report is that the paradox between insufficient inputs and budget flow backs to central treasury, shows that the overall system of financial expenditures and control have hindered efficient usage of budgets that have been allocated and given t institutions.

On the other hand, the ex vice president explained that once the annual budget is released to the university, the released fund is distributed to all colleges and faculties at dean level. All the interviewed deans confirmed that once the total budget for the faculty is released, schools, faculties and colleges do not internally allocate resources to each department. The dean administrates the finance or budget. Departments come with their demands each time. For each department, there is no specific budget for research, stationary, etc; the specific budget is only for salary.

All interviewees agreed that mostly when requesting budget, universities usually request in an exaggerated manner. On the other hand, the ministry also allocates budgets smaller than the requested amount having this point in mind. One good thing for institutions, according to the ex-vice president for academic affairs, is that if any HEI finishes all the allocated budgets before the end of the year, then universities have the chance to request for additional budget in the mid term of the second semester. However, he also added that mostly, universities do not ask capital budgets in the mid-year. If they do, it is a budget for academic staffs overload payment only.

One of the interviewees explained the following in the process of resource allocation:

> *From our own experience, we do not get 100% of the budget that is requested. The minister office will grant the budget by reducing some percent from what is requested thinking that the budget request is prepared in an exaggerated manner. But, here the defense will help to increase some amount of money to the already decided budget. But there is still a problem in the defense. That is, those officials sent for defense usually request based on the already known budget routine. They don't consider specific institutional and faculty needs for that specific year when they defend. They don't include the budget title even.*

Thus, it appears that there is a gap between what universities request from their government and what they actually receive.

5.3 Financial and Allocation Problems at Institutional Level

All respondents agree on the point that there is a very serious financial constraint in the university. Usually the university does not get the total amount of budget it requested and that impact all aspects of the teaching learning and research, quality of education and all other activities in the university. Let us take a look at some instances of budget requests and budget allocated:

Table 4: *Annual Budgets of BDU*

Years	Budget Requested	Budget Allocated	Reduced amount
2000 (2007/08)	135,600,000 Birr	96,332,800 Birr	39,267,200 Birr
2001 (2008/09)	185,774,900 Birr	128,382,000 Birr	57,392,900 Birr
2002 (2009/10)	276,547,972 Birr	234,600,500 Birr	41,947,472 Birr

Source: *MoFED and BDU Annual Budget Plan Documents*

From the above table, one can understand that every year, the university is getting lower amount of budget from what it requested. This is indicative of the existence of financial constraint. However, with this lower capacity of the government to afford all the necessary resources to the already existing universities, the government has the plan of launching ten additional universities in different parts of the country as part of the higher education expansion program. Thus, there is a high probability that this financial constraint will be getting worse and worse when the other ten additional universities are opened unless additional sources are made available.

Following the system level allocation, it appears that there is financial and allocation problems at institutional level. According to vice president for revenue generation, for example, last year (2008/09), around 28 million birr is returned to MoFED at the end of the fiscal year. This does not indicate that the university has utilized its budget to a maximum nor does it indicate that there was budget surplus. Rather, according to the vice president, it seems usually that because of inappropriate use of funds, poor financial management, problem of quick decision-making and poor and delayed purchasing system of the university. Because of these reasons, he explained, universities in Ethiopia are obliged to return large amount of money every year despite the financial constraints and shortage of instructional facilities and equipment. Supporting this, the associate vice-president for income generation and resource mobilization indicated the following statement:

> *For example, now we are in the seventh month of the year. However, a month ago, a report prepared by office of finance and plan indicated that only around 10% of purchasing has been done out of the total. But because of fear of administrative penalty, they prepared a false report*

> *indicating that the university has made 47% of the total purchase. This by itself is a big crisis.*

On the other hand, it appears that the budget allocated to the university is mostly not enough. However, all respondents assured that there is also a very serious problem of efficiently utilizing the available allocated resources together with the financial scarcity. Thus, according to them, it should not only be complained that the budget is not adequate; rather, from the allocated budget, it is good to ask how much of it have the university utilized? How much percent is used up to now? This is a point that leads to stress on the effective and efficient utilization of the funds and on appropriate planning.

According to the ex-vice president for academic affairs, the experience appears to be that most department heads and deans do not push the bureaucratic system in order to utilize the available funds. Actually it is reported that the process is lengthy and tiresome. Hence they do not want to go further after some steps. Even when the fund is allocated to each colleges and faculties, according to the ex vice president, they are not courageous enough to make decisions of using all the funds; nobody is risk taking in the system. But it is necessary to push the system. Plus, the support staff does not care whether the purchased materials arrive on time, as it does not affect them.

According to Science dean and the ex-vice president for academic affairs, this problem of financial management and poor purchasing system of the available resources is affecting all schools, faculties and colleges in the university. However, the problem is regarded to be more serious in science and technology faculties, which strongly require more materials and instruments than the others. In line with this, the dean of science faculty indicated that departments are suffering much because of the university purchasing system as follows:

> *The purchasing system is our biggest headache. The university purchasing committee purchases all materials we need. Departments present what they want and based on that the purchasing will be made at university level and at the campus level. There is no purchasing committee or team at faculty or college level. Even stationary materials are made at central level. Chemical*

purchase is made at an international level, as there are no chemical providers at domestic level. If we do not have chemicals, the whole experiment will be stopped. This problem is highly exaggerated in graduate school where they are extensively engaged in laboratories. About laboratory material, if one instrument is damaged, we do not have the exact expert to maintain instruments.

Moreover, the associate vice-president for Engineering faculty described the following with regard to shortage of budget to the faculty's practical activities:

As an engineering faculty, students are required to conduct lots of field trips and practical industrial works. The nature of some course by itself requires industry: some courses need to be delivered in the industry and relevant sector. However, to do all these, we don't usually get budget. There is always budget shortage. Students usually quest why we are not going for field trips? Why we are not going to this and that industry? And our usual answer is we don't have budget for this. The funny thing is that there may be some budget for other purposes, which is not yet utilized. But we cannot shift that unused budget. Thus, now it has become usual to say 'we don't have enough budget'.

As it has been indicated above, the financial scarcity is not the only obstacle. According to the ex-vice president for academic affairs, this financial constraint is accompanied by other problems related with planning, purchasing system, less concern given by immediate administration responsible bodies- deans, vice-presidents, etc. He also gave an example that if the university is not purchasing, then it is not appropriately using its budget; this directly affects the teaching learning and other related activities of the university and its quality. That is what the engineering faculty associate vice president explained:

We have budget shortage every time. Plus, when we finish our budget, we have the right to ask for additional budget in some specified time after presenting our utilized budget report. However, the problem in our university is not this one rather we are not even appropriately utilizing the already allocated *budgets. For this, the biggest obstacle is bureaucracy, poor management system and the university purchasing mechanism. This has a very serious impact on the quality of the education, performance of the institution and other related issues.*

From the above statement, almost all interviews stressed that mostly it is not only because of shortage of budget but also because of purchasing system and the financial management of the university that most of the problems occur and most of the materials are not provided.

Thus, according to the interviewees' perception, it appears that the problems can be seen in two ways:

1. from a management point of view, the university has serious problems of financial management and appropriately planning and requesting budgets.
2. once the budget is allocated to the institutions, there is also problem of quick decision making, using the money for the right purpose at the right time. This is highly related with the purchasing system and financial management system of the university.

The biggest problem according to the ex-vice president for academic affairs is the financial management and purchasing system of the university that is hindering most of the things. Therefore, all in all, the problems with regard to resource allocation, according tour interviewees, seems to revolve around:

- lack of efficient utilization of the funds
- financial management and planning
- the university purchasing system.
- bureaucracy
- decision making administrative staffs

Thus, the problems are not only related with financial constraints. They also appear to be linked to financial as well as managerial issues.

5.3.1 Financial Autonomy

With regard to the university's financial autonomy currently, all respondents stated that when utilizing the allocated budget, public universities do not have any interference from MoE, MoFED, the University Board or any concerned body. So, they have real financial autonomy. That is, according to the HE Proclamation of 2009, a public institution shall be free to use its income and budget as it sees fit, in accordance with its approved business plan. The president is at the center of any financial management and decision once the budget is allocated to all institutions. In addition, the Higher Education Proclamation of 2003 stresses the financial autonomy that is given to universities. However, the financial autonomy granted talks about the freedom of budget expenditure in accordance with the faculties plan. It does not allow spending the money in whatever they want.

Previously, according to the ex-vice president for academic affairs, faculty deans have been granted limited financial autonomy. That is, they were allowed to sign on financial expenditure of their faculty up to 50,000 birr, which is small amount of money as compared to the annual budget of the faculties. However, as of 2009 based on the senate decision, all deans have been awarded the full financial autonomy; they are given the right to administer their allocated budget and the right to sign and order financial expenditures without limit. Thus, based on the senate decision, deans have been given full responsibility of utilizing and deciding on their finance.

However, despite the fact that university administrators (vice presidents, associate vice presidents and deans) have been given full autonomy, there is resistance in that most of the officials do not exercise their autonomy. According to the ex-vice president for academic affairs, despite their inability to exercise their autonomy, managers externalize the problems related with financial management. He also added that the problem in this regard is that mostly the deans do not utilize their autonomy because of fear of deciding on finance, fear of taking risks, fear of the consequences and related factors, delayed decision and lack of experience. In his perception, that is the biggest weakness evident in the university at this moment. Here, the ex-vice president for academic affairs remarked that engineering faculty is the only faculty trying to aggressively use all their budgets.

All interviewees boldly expressed that they have the financial autonomy, but still the delayed bureaucratic procedures and poor purchasing system of the university is not enabling them to utilize the available fund and exercise their financial autonomy. Science college dean even indicated that this financial autonomy could be more utilized if each faculties and colleges have their own purchasing committee that they can order. Moreover, the dean of school of law notes a supporting statement to this in that:

> *Structurally we are autonomous because we are granted the autonomy. We know law faculty's budget will not be used any other faculty. But practically, I cannot say we are autonomous, as we are not using our budget as fast as we need. The purchasing system curtails the autonomy granted to us. Anyhow, there is a promising thing with regard to financial autonomy.*

A concluding remark was given by the associate vice president for finance, plan and budget as follows:

> *I have fear on the financial management system of the university. In public universities, the rule binds you not to act in any way you like and even not to fully utilize your autonomy. But private institutions have no problem in this regard as the president is the owner and can make any decisions without any binding rules.*

In conclusion, it is evident, both by law and by principle, that public universities in Ethiopia have been granted financial autonomy to the fullest extent. Based on the HE Proclamation, which is the law, public institutions are granted financial autonomy for utilizing their budget freely. In principle, (financial) autonomy in HE is a key ingredient for success. However, the autonomy as is indicated by all the interviewees is not exercised as granted because of administrative weaknesses and problems as well as poor financial management system in the university.

5.4 Pressure for Revenue Generation and BDU's Institutional Trends

The income generation trend of BDU appears to be highly tied with distance education, continuing (evening) education and summer programs. According to the associate vice president for funding, plan and budget, the university with this regard at this moment is the strongest in the country in one stream- distance education program. By stating a national MoE document, he confirmed that the university is ranked first from all public universities in the country in the year 2008 and 2009. The program consists as much students in the regular program as that in the distance program (Refer to table3). Currently, according to the associate vice president, there are around 16,800 students in the distance program; when you see this from the establishment of the distance education program (which was only three and a half years ago), the university is performing excellent. Thus, the university is earning large amount of money in this regard.

The associate vice president for income generation confirmed that all schools, colleges and faculties in the university are generating incomes in their evening, summer and distance programs. Despite the differences in student numbers from one faculty to the other and from one department to the other, the university seems to be actively engaged in this business. In addition, there are also some short term training and in service programs provided basically in law school, in education faculty, in some fields of engineering faculty and business and economics faculty. The ex vice president noted that the requests for these trainings mostly come from either regional government offices, governmental or non-governmental organizations.

However, as the associate vice president for income generation noted, when you see the other sectors of income generation, BDU is relatively speaking weak. For example, Addis Ababa College of Commerce reportedly produces one-third of its recurrent budget from evening courses and contracted short courses and researches, but Addis Ababa University produces only about 7% from such fees (World Bank, 2003). In addition, it is estimated that at the agricultural colleges at Jimma and Awassa may generate one-fifth of their recurrent budget from agricultural production (Kastbjerg, 1999). However, according to associate vice president for income generation, a contracted research in BDU is not well developed in the university. In addition, he also remarked that with regard to finding research grants individually as well as in-group, the university is really weak be it at academic staff, at department or faculty level. The associate vice president notes a further indication of this by indicating the following instances: there are model public universities for this in the country like Haromaya University, Mekelle University, Jimma University; they have huge projects with different sectors, which BDU does not have. Mekelle University in its Agriculture project earns in 100 millions of grants from strong partners like Belgium government and universities related with agriculture faculty. The only good experience in this regard about BDU is some works done in Land Administration Institute. However, he implied that the link is made even more by external pressure from Environmental Protection Authorities and from SIDA directors than from the university administrators. Therefore, the conclusion of the interviewee was that when we see generating income from research grants and projects, it can be said BDU is working almost nothing.

The associate vice president suggests that we have the office of Income Generation, but still the office cannot be strong. He added that we need action plan, which can be practical instead of having ambitious and fancy plans. We can generate incomes from like opening supermarkets, opening big cafeterias, and lounges for students in and around the university community services, etc. We should have pragmatic and workable plans for this.

The same weakness of generating income is seen in different faculties and colleges of the university. For example, in college of science, according to the dean of the college, except the fact that they have good income generation by distance education and continuing education, it can be said they are at zero level of generating income in the other sectors. For the college of science, the dean remarked that the full functioning of the laboratories is a key for generating income; they need to have adequate instruments, chemicals, all the available instruments should function, they also need laboratory experts- but all these are lacking. That is why the dean of the college regretfully expressed the weak income generation as follows:

> *We were asked to analyze different things in our laboratory from the city and from the region. This is one income generation mechanism. But for the time*

being, since our laboratory has some shortcomings and shortages, we are not responding to them- we are not generating income as much as we can. If we fulfill all the requirements for our laboratory, not only we expect industries to come here, but we will go and ask industries for some link, we can provide community service.

Despite the weakness of the university in generating additional revenues, finding research grants and creating strong university-industry link, there are some faculties, which are better engaged than others. For example, according to engineering faculty associate vice president, from engineering faculty, civil engineering is providing some technical support to the regional transport office; and also they do some material test to different organizations, conduct site study and provide consultation services; hydraulic engineering is working with the municipality of the city of Bahir Dar and conducting situational analysis, which enables to generate income and to create link with the organization for students' practical fieldwork. Textile and Garment Institute have mutual relationship with Textile Factory, which is near the university campus. The Institute provides technical and professional support, conducts some research, sends students for practical work- internship and generates some income.

A good example for a better income generating part of the university is the school of law. As to the law school dean, every year, school of law has the strategy to link the school with different organizations and corporation in the form of university- industry link. He noted that they are doing this to generate income but also the Justice office requires them to have direct contact and involvement in the Justice and legal issues. So, in this regard, the school designs different projects related with legal issues: it can be training, legal service, professional development, collaborative work with Justice offices and different NGOs. The problem in here is, as noted by the dean, once the school gained sponsors and external funds, the school does not have the right to sign the financial agreement in the name of the school but the university does that.

The dean of law school has stated that the school of law had really strong links with four Regional Governments: Gambela, Afar, benshangul Gumuz and Amhara. Accordingly, the purpose of the university- industry link is:

- to generate income for the school and the university
- to make those in the justice office and legal sector beneficiary from the faculty in the form of training, professional development or legal aid.

The dean of law has indicated the whole process as follows:

> *We used to generate incomes to the university in millions. However, after the school of law did all these, the academic staffs are not benefitting. This is discouraging. Even, sometimes, they don't allow us to use cars to transport modules for this purpose.*

The reason, according to the law school's dean, is those at the top, not to say all, are people who:

- benefit from the poor bureaucracy
- are change resistance
- are not ready and willing to motivate those who are working well
- do not understand or do not want to understand the value of incentives and motivating factors to organizational performance.

FBE dean noted that with regard to income generation, the faculty is doing nothing except distance education and continuing education. The number of students in FBE is much higher than any other faculties of the university in distance education. Other than this, the faculty is doing nothing to generate income. In addition, the dean remarked that the faculty does not have any plan for income generation because of the overloaded routine work of the office and the academic staffs. The dean stated that they are expecting more from the office of income generation and resource mobilization about the strategies and future plans of generating income.

In general, it seems that the income generation capacity of the university is very limited to a single sector and not well developed. To solve this problem, the university in its newly reorganized structures has opened an independent office for this purpose at the Associate Vice-President level as of 2008: *The Office of Income Generation and Resource Mobilization*. This office has a very diversified and multifaceted income generation plans for the university. The document, which was presented to the university senate and approved with some modifications, is planning to generate income in all the faculties, schools and colleges of the university. Moreover, it has also a plan of generating income from alumni, philanthropies, donations, industries, etc. In the structure, there are four major sources of income generation, which are potentially capable of generating large amount of revenue to the university. These are:

1. Business works
2. Fund raising
3. Donation
4. Providing services and products related with research and development

Based on the income generation office document, the plans are analyzed as follows. The business works are planned to include opening different cafeterias, supermarkets, stationeries, renting halls, and other big business centers. In fund raising, the University have the plan of making 20% of the university graduates to permanently contribute about 15% of the university expenditures in different forms including alumni, exhibition, telethon, launching university day, etc. Donation can be obtained from NGOs, industries, and regional as well central government, international organizations, etc. For this, the office has the plan of creating strong links with potential contributors. Lastly, the services and products include diary, pharmacy products, agricultural products, construction, opening big garage in one part of the city, etc. The university has planned to open big garage for maintenance and related services in engineering faculty. This will enable to save the university cars expenses and also generates income for the university by providing the services to the city. The university is also planning to have animal center in its agriculture faculty, plant science research center is to be launched also. This will allow the university staffs to be engaged in research works and also to establish good link with other rich universities in the west so that they can donate and also do their own research. The university will also have incubation center for its researches. For all this agriculture related income generating centers, the university has adequate land.

When asked about the success of generating income based on the above four sectors, the associate vice president for income generation indicated that at this very point, it is not possible to talk about the success of the income generation strategies prepared by the office. This is because most of the planned projects are not yet implemented practically, some are on process, and others need time and resource. However, those that are implemented are generating incomes. For example, he indicated that the university is generating 7000 birr per week by the toilet car, which is 28,000 birr a month and 336,000 birr a year with a single car. The demand is very high not only in Bahir Dar city but also in other 5 towns around the city. As a result, the office requested additional 4 cars to be purchased. However, the university known poor purchasing system is still not responding. In addition, there is woodwork and metal work center of the university. The university had contract worth 4 million birr with ADA. It has promising future as woodwork and metalwork related products are highly demanded in the city. He also added that income is also generated from diary products in the university currently in small scale. In addition, one interviewee remarked that the German government under GTZ is also planning a huge project center for engineering faculty, which will enable the faculty to enrich its resources and teaching-learning environment. The project is already underway.

5.5 Research Fund

As it has been seen in the previous section, there have been very serious financial constraints. These constraints are particularly serious in research activity as compared to teaching learning, physical facilities, etc. The financial constraints appear to strongly impact the research work in the university. Academic staffs are required to conduct scholarly research as part of their responsibility. However, the financial situation for research is discouraging. Thus, academic staff is not that engaged in research works because of serious financial constraints.

On the other hand, when we see BDU University Legislation of 2005 Article 23, it clearly states that an academic staff of the university is required to be a scholar with a full devotion to the advancement of the frontiers of knowledge; and conduct problem solving research works for the advancement of knowledge mainly in his/her area of specialization. Thus, the legislation has put 75% of an academic staff time to be for teaching and 25% to engage in research. However, according to the ex vice president, the fact is far beyond this in that the very majority of staffs are 100% and even more engaged in teaching because of so many reasons. One of the biggest problem, as indicated by the ex-vice president for academic affairs, is the research culture in the university is almost inexistent.

All respondents described that the biggest problem with regard to research is the resources allocated to it and the adequacy of the fund for research work in the university. For Research and Development work of the year 2009/10, the university requested 5,443,482 birr. This total budget is less than 2% of the total annual institutional budget. According to one of the respondents, this indicates that both the institution and the government are not giving much focus to the conduct of research despite its significance and its being one of the three missions of any university. One of the interviewees even described that the budget for research work is less than the budget for stationary.

According to associate vice president for income generation, the RPO was merged with Office of Graduate School 2 years ago. Ever since its merger with Graduate School, there is no research work in the university for about the last 2 years. The budget allocated for research work is not utilized and lastly returned back to central treasury. This appears to affect the different university seminars and workshops being prepared. According to the ex-vice president for academic affairs, the biggest problem is that the research budget is very small. In addition, as compared to other public universities, the research budget for BDU is very small. In the ex-vice president's perspective, this is directly related with two factors: one, the research performance of the university is very poor. Second, the university almost does not have any external link with any other university or organization for research works and grants. So BDU is at a very poor level.

The dean of college of science has explained the following statement to indicate how research is suffering in the college:

> *For example, there are some important research projects prepared individually and in groups. They were examined and ready to be conducted but yet the professors didn't start the research only because there is no fund. We have tried all our best to improve this problem with regard to research. But always problems are externalized. In addition, the payment by itself is not that attractive and motivating. Staffs are discouraged to do researches because of the low research budget. 15,000 birr doesn't do anything for a natural science staff to conduct research. It cannot go more than buying one chemical. So staffs are finding grants by themselves. So the best solution at the moment is finding third stream funding.*

To do scholarly research, there are lots of things to fulfill or provide, along with the availability of sufficient budget. Time is one important factor together with well-equipped and motivating environment for research work. However, all interviews have indicated that there is no environment, which is conducive for this at this moment; that is, if we want staffs to do real research, it should be 75% research and 25% teaching, but all is engaged in teaching and others in administrative position; every teacher is overloaded. Those with research potential are in high university management position. The administrative work is routine and the bureaucracy forces them to seat there and conduct meeting, discuss about departmental level issues, minor student problems, which can be solved at staff or departmental level.

Thus, despite the fact that research and community services are the other two big missions of the university, it appears that they are not even considered in that way. There is no community service provided by the university except the free legal aid by law faculty, some training by Sport and Physical Education, some material (computer) aid by the university.

The dean of school of law also notes the discouraging research culture of the university as follows:

> *The regional office of Women's Right requested us to do a research. We design the proposal and conducted the research and made the university beneficiary. But we benefited nothing. Lastly, staffs become so disappointed and discouraged. And finally, we decided not to do projects in the name of the university. We began to contact organizations individually and began to work by ourselves ... You cannot help it other than doing projects individually if the university is not willing to motivate you and give you incentives, if the university is creating obstacles from buying pens and stationeries. This trend will kill the university in the long run as no one would like to do researches and different projects in the name of the university.*

However, this being the fact about the research culture, incentives towards motivating academic staffs to do research and the adequacy of the research budget, the university has the vision of becoming *center of excellence for community focused, practical and democratic learning, training and research*. And, one of the missions of the university is *"to increase the quality and quantity of research works in the university"*. Following this, the ex vice president explained that increasing the quality and quantity of research work cannot happen in vacuum; unless all those required for quality research in large amount are fulfilled, achieving the mission of increasing the quality and quantity of research work in this situation is impractical and impossible whether in the short or in the long run. The associate vice president for engineering faculty stated that the budget by itself tells you whether you can achieve it or not. All those interviewed agreed that it is impossible and impractical to achieve this mission at this moment with this fund, working environment and research culture. Even, the associate vice president for income generation expressed this situation in this way:

> *It is really impossible to achieve this mission practically in this trend and with this fund. You need miracles to achieve this! However, if we work hard, if we*

have good management, if we generate funds, if we create research culture, it can be achieved through time. Otherwise at present, it is very difficult to do so.

Therefore, it seems difficult to achieve this mission in this institutional research culture, with this insignificant budget and de-motivating research trend. However, respondents suggested that it is a necessary requirement to create research culture, to put it as something compulsory to conduct research, to practically apply the 75%-25% of academic staffs responsibility; it has to be put as one responsibility of the teacher, increase the incentives, loosening the promotion through research, creating motivating situations like 'the best researcher of the year', etc and more importantly, pressurizing the government to allocate more fund for research. In this way, a better environment for research can be created.

5.6 Impacts of the Current Financial Constraints

The financial constraints of an institution have very serious impacts in all the university's activities and missions. According to the ex-vice president for academic affairs, this financial constraint has different manifestations in the university; this can be seen in the lack of computers, Internet, lack of free access to journals, research budget, lack of buildings for classrooms, for laboratories, for staff offices, problem of field trips, problem of practical oriented learning, etc. He also stated that the university has some modern lab equipments but they are not still used because of lack of experts. Plus, students do not have practical computer training except learning computer classes in theory. This happens because of the fact that there are no enough computer laboratories and equipment.

It is the common perception of all respondents that the impact of this financial constraint, coupled with mismanagement, poor purchasing system and problem of financial management, is increasing in the university. According to science faculty dean, despite the fact that it is the seventh month of the year, there are still two groups of freshman student who do not begin class because there are no empty classrooms. He also stated that unlike the previous times wherein classes were conducted up to 5 pm, classes are now extended to 7 pm; there are also classes on Saturday too, this is creating chaos with continuing education, as the continuing education program is mostly conducted on Saturday and

Sunday. The dean also explained that there are classrooms assigned for each faculty and for each department; however, these classrooms do not go with the number of students. There is also a very serious shortage of chairs in the classroom. It appears that some is because the number of students in one class go up to 80 in which some of the class do not even accommodate this much number and in other cases the chairs purchased are with poor quality and do not last long- related with corruption. For example, according to the dean of science, there is the situation that because of lack of chairs and size of class, there happens that students sit on the floor and attend classes; laboratory works also extended to Saturday and the number of students in one laboratory now is trice as that of some 5 or 6 years ago.

All respondents also explained that there is a big headache with regard to shortage of offices for academic staffs. According to science faculty dean once again, there are newly opened departments like industrial chemistry and statistics. They do not have their own offices and even the head is sharing office with other staffs. Thus, students and he himself are obliged to do the head tasks in a shared office. This problem is not yet resolved. The dean stressed that most of these problems are related with the fact that when the huge expansion comes, with the increasing number of students, much focus or priority is given only for dormitories, not to laboratories, classrooms, offices and other facilities; the priority for dormitories than classrooms or offices is resulted because of low government budget.

According to associate vice president for finance, budget & plan, because of the large number of students, the necessary teaching learning environment is not provided, the necessary materials, library facilities are not provided: there are no enough classrooms, chairs, some facilities, offices for academic staffs and related facilities; academic staffs are discouraged to do researches because of the low research budget. Moreover, it appears that despite the fact that the legislation talks that staffs should do the 25%- 75% teaching research, it is impossible to ask staffs to be engaged 25% of their time in research as there is no enough money, no enough incentive, no good working environment, staffs all overloaded with teaching tasks, etc. The perception of the interviewees is that these factors lead to have an under motivated or de-motivated academic staffs which absolutely degrades the quality of higher education in the end.

When asked about the intake capacity of each department, departments respond in terms of the available number of academic staffs; they do not consider the availability of classrooms, dormitories, chairs and other things because this is something that department heads cannot analyze while considering their intake capacity. But for the upcoming year 2010/11, the associate vice president for finance, budger & plan reported that there is a slight improvement that departments are asked to tell their intake capacity by considering not only their staff number but also availability of classrooms and laboratories- yet departments do not have permanent classrooms. But it seems that still MoE may allocate new students more than the capacity of the institution.

The common response from all interviewees is that there is an obvious budget shortage; but mostly we attribute it to the fact that the country is poor and unable to afford all the demands. But again according to all respondents, the serious problem is inappropriate utilization of the available resource. Supporting this, the associate vice president for finance, budget & plan explained that the biggest thing to consider here is not only the shortage of the budget but also, and more importantly, the adequate utilization of budget. He stated as an example that, DIF (Development Innovative Fund), which is funded by World Bank, granted 70 million birr to BDU; however, till the end of the project, the university has utilized only 4 million of the total granted money. The biggest problem in DIF according to associate vice president for income generation was administrative problem and trying to get some benefit illegally from it. He indicated that there was an incentive that allows paying 1-5% for project initiators. While other universities paid this, BDU didn't pay only because the administrators were not benefiting from it.

It seems that because of the inappropriate utilization of the budget and the poor purchasing system, all faculties and colleges in the university are being highly affected. This misallocation of public funds could imply the fact that higher education institutions are not equipped with the necessary teaching learning facilities. They may not also receive adequate maintenance and infrastructure, which are vital to achieve the missions of the institutions. But, as it was stated earlier by the ex-vice president for academic affairs, most seriously, engineering faculty and Natural Science College are the ones who are highly affected more than the others; they need more practical materials, chemicals, labs, and other facilities- all or most of which are not well provided.

Similarly, the dean of school of law stressfully quoted that the financial stringency and the poor institutional financial management system is crippling the different activities of the school. He noted the following statement:

> *We do have lots of problems. There is shortage of offices for staffs, lack of chairs and tables, we have moot court but the office does not have chairs, tables and other facilities. Even for the moot court, despite the fact that it is the basic part of the school, there is no specific budget for it; it is our laboratory like science faculty. We requested so many times but we didn't get answer yet. The legal aid is also not considered as part of the learning. Mostly, we are using finance from external aid like action aid, ministry of justice, etc. In here, the problem is not only the shortage of the fund but also the attitude towards the moot court and legal aid by the university administrators.*

Hence, it appears according to the dean that because of the financial constraint, a lot of things are sacrificed. First, the quality of education is deteriorating; classrooms are serious problems, chairs, and offices for staffs are serious shortages, class times goes beyond the normal schedule till the evening, class size or number of students is above manageable for a single classroom.

The dean of FBE noted that:

> *Even if we get all what we request, there will still be constraint because of the fact that the federal purchasing system and the university purchasing system will not allow you to use your budget as far as you can. The procedures as they are exhaustive will create big obstacle*

Therefore, with this financial constraint, future challenges and problems related with financial management, according to the ex vice president, the current level of funding of higher education in Ethiopia might be inadequate to deliver quality education.

Discussion

The financing of public higher education in Ethiopia clearly requires multiple adjustments to make it adequate, more effective and efficient. The funding mechanism in the first place is one factor, which needs immediate adjustment. That is, the line item budgeting that characterized the public higher education institutions in Ethiopia is still persisting despite the fact that it was supposed to be implemented as of 2008 (MoE, 2003). It is evident that as the higher education system rapidly expanded, the present line-by-line negotiations of Higher Education Institutes budgets would become impractical and inefficient. A rational, fair, efficient and effective system of allocation is still needed. That is the proposed block grant funding mechanism should be made practical. In the study, the resource allocation mechanism has been found to be one factor for inefficient utilization of the available resources in the university and for budget flow backs to central treasury.

Universities highly depend on the appropriate and timely availability of all the necessary resources and materials. For this, it needs a well-planned and organized purchasing committee, among other things. This is because universities are service providers not producers. So they need materials and all the necessary facilities to provide the service. However, if no material on time, the service will be hampered.

The phenomena of underfunding or financial constraint, on the other hand, can be explained in two levels: at government level and at university level. Thus, it was observed that the budget allocated by the central government is not equal with the budget requested by the institutions, which may be related with the low capacity of the country, the exaggerated budget request of the institution or other factor. Whereas, the institutions, which are the implementers of government policies, are responsible for the effective and efficient utilization of the allocated budgets. However, the case in BDU confirms that the university is poor in the proper and efficient utilization of the available resources, poor in its financial management, lagging behind others in income generating capacity, poor in decision making with regard to finance. This puts BDU as one of the weakest universities in Ethiopia in terms of its financial management system, administrative commitment, decision-making, research work and publication, income generation and external link despite the fact that the university is one of the most developed, capable and well equipped in the country.

These financial constraints in the university affect all the institutional activities (teaching learning, research and community services) and their related infrastructures seriously. However, research has been found to be the most crippled institutional mission that has been suffering a lot. Thus, quality of education, research works and community services are compromised as a result of the financial constraint.

The university has the capacity to generate incomes in different sectors. However, it is limited to very few revenue generating sectors- distance education, continuing and summer education programs. With regard to finding research grants, industry links, finding donations, the interviewees reported that the university is doing nothing at this point of discussion and regarded as one of the poorly involved and weak HEI. And lastly, university administrators, despite the awarded financial autonomy, are not appropriately utilizing the awarded financial autonomy because of diverse factors.

Therefore, all in all, results of the interviewees in the study indicated that the case study university in particular and Ethiopia public universities in general are facing serious financial constraints for their institutional missions and activities which in turn seriously affecting the quality of the teaching learning and the research work. The university generates income in very few stream of generating revenue; otherwise it is found to be one of the weakest public universities in this regard. Moreover, despite the awarded financial autonomy, university administrative personnel are not exercising their autonomy.

Chapter Six

Conclusion

The main objective of the study was to analyze how financial constraints are affecting institutional missions and operations and how is the university responding to this. To analyze this, the study tried to show a detailed literature reviews about the different dimensions of funding higher education basically focusing on the following major themes: the funding of higher education- global trends, resource allocation mechanisms in higher education, income generation, financial autonomy, funding of higher education in developing countries and an overview of the Ethiopian higher education panorama.

In order to assess this with more depth, case study qualitative research was used. This study was conducted in one public higher education institution, Bahir Dar University. The methods used were semi structures interview guides and document analysis. Two categories of respondents were involved both at the top management level of the university: those who are at the vice president and associate vice president level- totally 4 and those who are deans of their faculties- totally 3. Based on the data analyzed, the main results are discussed in the next chapter. Then, following the results of the study, some suggestions are presented.

6.2 Major Findings

The analysis done with this case study provided some interesting material for reflecting about the theme of this dissertation.

Resource allocation mechanism in Ethiopia is currently line item budgeting together with some form of negotiation between government and institutional representatives. On the other hand, the current form of financing higher education in Ethiopia appears to be inadequate and inefficient. The situation is likely to get worse as Ethiopia faces the challenges of demographic pressures and improving the quality of education and expanding the provision of higher education; there is a plan underway of establishing additional ten universities in the country.

It is found that the responsibility of preparing budget plan is the responsibility of each department under the department head. However, the way departments plan and request a budget is not a well-planned system. It is not also timely; this is because departments do not have any financial plan beforehand- thus they simply copy previous years financial documents with very few amendments. In addition, when institutions request budget, it is usually prepared in an exaggerated manner because of the fact that the government is not going to give them what they request. This may be related with the fact that budgeting or resource allocation is not based on performance. Similar results were also found in Ghana Effah (2003) and Uganda Musisi (2003) in that only 56% of what universities requested in 2000 is provided in Ghana.

Once the budget is allocated to the university, the dean of each faculty, school or college administers the finance or the budget. Departments are only required to come with their demands; they are not directly involved in the administration of their funds.

One important finding of this study is that there is still a paradox between insufficient inputs or budget and budget flow backs to the central treasury. The flow back does not indicate the surplus of the budget rather it clearly indicates that the already allocated budgets are not efficiently used. That is, there seems to be misallocation and underutilizing of the allocated resources in the university. This is manifested by the inappropriate use of funds, poor financial management, problems of quick decision-making and poor and delayed purchasing system of the university. Moreover, the study has also shown that from the management point of view, the university analyzed has serious financial management problem. This is observed in problem of appropriately planning and requesting budgets, in the poor purchasing system of the university, in the process of creating efficiency in utilizing the available resources and in the budget flow backs.

There are very serious financial problems in the university in particular and in the national higher education of the country in general. It is found in the study that the budget allocated for the university for the past 4 years is much less than the budget requested by the university. This does not indicate that the budget shortage is only in the past four years as it was all the time. In addition, results of the study indicated that the institutional financial constraint is compounded with and worsened by other problems of the financial aspects in the university. These problems include problem of financial planning, the poor purchasing system of the university, poor and delayed decision making by the administrators of the university, lack of optimism and willingness by the immediate management personnel, etc.

Another major finding of the study is that the institutional financial constraints are impacting the different activities and missions of the university seriously. The quality of education is becoming a serious problem; research is suffering a lot, there is almost no community service by the university except the ones given by Sport and Physical education department and Law school. Moreover, the study has shown that almost all faculties, schools and colleges in the university are suffering from lack of classrooms, chairs, offices for academic staffs, shortage of laboratory and lab equipment, problem of internet access, shortage of up-to-date and adequate library facilities, etc. However, it has been found out that college of natural science and engineering faculty are the two most seriously suffering faculties in the university. The reason is that these faculties demand more and expensive materials and facilities for their teaching learning and research work than the other colleges and faculties under study. All these factors could lead to an under motivated or de-motivated academic staffs which absolutely degrades the quality of education.

Of all the different university missions, activities and necessary facilities, research work appears to be the single most seriously affected by the financial constraints in the university. The study has shown that research work is highly crippled because of the insignificant research budget and the poor research performance and research culture of the case study university. Together with this, when looking into the institutional characteristics of BDU in terms of research work, a striking finding indicated that the university have poor research performance at national level; poor external link for research grant; poor institutional research culture, de-motivating environment for research work, teachers are highly overloaded with teaching which does not enable them to have ample time to conduct scholarly research. As a result, the university mission of *increasing the quality and quantity of research work in the university* does not seem feasible to achieve in this situation.

With regard to income generation, the university is heavily engaged in distance education, continuing education and summer programs. It is generating income from these sectors and also providing the necessary service to the region. Thus, the main source of revenue to the university appears to be evening, summer and distance education. However, the study has shown that with regard to finding research grants, donations, contract research, and other income generating sectors, BDU can be considered as one of the weakest university in the country as compared to its age, staff profile, and the other public university, which are in the same status with BDU. The university is not using its potential of generating revenues from private sectors because of different institutional problems as well as because of lack of commitment to engage in generating incomes. A little contrary finding to this is that at the faculty level, engineering faculty and law faculty are relatively better engaged in generating revenues than the other faculties in the university. Other than these faculties, the other can be considered that they are at almost zero level of generating additional incomes to their faculty as well as to the university.

To enhance the income generation capacity of the university, an independent office called office for Income Generation and Resource Mobilization is opened. The office has a strategy to heavily generate revenue under four categories: business work, fund raising, donation and providing services and products. However, the strategy designed by the office is a little bit ambitious at this moment and requires commitment and smooth working relationship with the other units of the university, which at this point of discussion is a challenge to the university.

Lastly, it has been found out that all the university administrators are granted financial autonomy and all are aware that they have the autonomy to decide on their allocated finance. However, because of lack of managerial experience, fear of decision making, fear of taking necessary risks, the poor purchasing system of the university, delayed decision and the lengthy bureaucratic procedures, most of the management personnel are not exercising their financial autonomy.

Therefore, this case has attempted to provide a brief overview of the public higher education funding aspects of Ethiopia in general and the case study university in particular.

Thus, based on the raised research questions of the study, the researcher concludes that the current resource allocation mechanism is highly inefficient and affecting almost all aspects of the institutional activities. In addition, there is a very serious financial constraint in the case study university as well as in the country. It can also be concluded that the university is poor in the proper and efficient utilization of the available resources, poor in its financial management, lagging behind others in income generating capacity, poor in decision making with regard to finance. This financial constraint is affecting all the institutional activities and their related infrastructures seriously. Thus, quality of education, research works and community services are compromised as a result of the financial constraint and the inefficiency of the institution. And lastly, university administrators, despite the awarded financial autonomy, are not appropriately utilizing the awarded financial autonomy because of diverse factors.

6.3 Policy Recommendations

The use of block grant funding that was proposed to be used in the form of formula funding should be an urgent issue at the national level. This is because the findings of the study have indicated that the current resource allocation mechanism (line item negotiation) is creating space for budget flow back and poor efficiency.

The financial constraint of the university is worsened by some other factors like problem of financial management and purchasing system. Thus, it is advisable to grant full autonomy to faculties with regard to research work, community service, financial management, budget utilization and purchasing system. Establishing purchasing committee or team at faculty level saves delay, bureaucracy, lengthy auction, providing materials on time, etc. Establishing financial management office at faculty level will increase efficiency and effectiveness and even accountability.

The strategies and plans designed by Income generation office is a good one but a little ambitious. So, it would be more appropriate if they consult the income generation capacity of each faculty and department; and also it would be more practical if they design short term and long term plans beginning from the most achievable ones based on the institutional potentials for generating revenue.

BDU should also share experiences with other public universities in the country about income generation strategies. Using best practices of other universities will help BDU to strengthen its weakness on the part of external link, finding research grants and so on.

6.4 Limitations of the Study

This study is a case study done in a single public HEI in Ethiopia. Thus, results of this study cannot be taken for granted to understand the feature of public higher education in the country in general; that is the study is not generalizable as it is difficult to generalize from single case study. Rather, it can provide a portrait of the way public universities in Ethiopia are dealing with those financial challenges.

This study is limited to the study of some specific aspects of higher education funding-resource allocation, financial constraint and income generation. Thus, it does not include other basic aspects of higher education funding like cost sharing.

The study is also restricted in terms of administrative times. That is, all the data obtained by the interview describe the current situation under the current administrative personnel. It does not go beyond.

This study would have been more representative and the findings more generalizable if the researcher had included in the interviews all the university deans and department heads in particular and if all public universities in the country were included in general. However, doing this was not manageable.

6.5 Suggestion for Further Research

The study revealed the current situation with regard to funding in public higher education in Ethiopia with basic focus on financial constraint and income generation in the case study university. Thus, to understand deeply the comprehensive feature of higher education funding in the country and to consider what actions must be taken at policy level, additional works in the area are highly recommended with focus both at institutional as well as national level. Research focusing on cross-site comparative cases is needed.

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Appendixes

Appendix A

INTERVIEW GUIDE

The interview guide is categorized into three groups based on the type of interviewees. The first interview is prepared for the two vice-presidents (Vice- presidents for academic and research and vice-president for business and development). The second interview is prepared for the three associate vice- presidents (associate vice-president for budget, plan and finance; associate vice-president for income generation and resource mobilization and associate vice-president for engineering faculty). And the third category of interview is prepared for the three deans (dean for college of business and economics, dean for college of natural sciences and dean for school of law). Below is presented the interview questions for Academic Affairs Vice-President.

1. Interview Guide for Ex Vice- President (*Academic Affairs*)

Background of Respondents

Name:

Sex:

Administrative Position:

Academic Qualification:

Working Experience:

The Interview Questions:

Resource Allocation

1. In the process of budgeting from central government (MoFED), is the budget allocation corresponding to institutional activities and operations or already set centrally?
2. The annual budget you requested for 2002 E.C. (2009/10 G.C.) was 185,774,900 Birr; however, the budget granted is 128,382,000 Birr. There is a funding gap of

about 57,393,000 Birr. What do you say about this? What about the annual budget of the year 2002 E.C.?

Financial Constraints

3. Obviously, there is some amount of financial constraints from the above statistics. In your view, how significant is the financial constraints for public higher education in Ethiopia? And, how significant is the financial constraints for Bahir Dar University (BDU)?
4. What have been its major impacts? And what are your evidences for this?
5. How is this financial constraint affecting the fulfillment of institutional missions?
6. Whenever expanding and opening new fields of study, all require basic instructional materials including laboratories, basic laboratory equipment, chemicals, sufficient computer and Internet access, library books, journals, sufficient amount of classrooms, libraries, field trips, etc. Considering the importance of all these things, to what extent is your university affording these in adequate number and amount?
7. It is a common phenomenon that when there is budget shortage/underfunding, it has calamitous effect on teaching learning and research; it can even lead to reduction to research and other grants among others. How is this being handled in your university?

Income Generation

8. How is the university handling the basic institutional operations (missions) when there is not enough funding?
9. How is your university responding to this financial stringency?
10. Is your university trying to diversify the funding base? If so, how?
11. If the university is diversifying funding base, why is it doing so? Is it because to strengthen university's link with industry and corporations? Because of different financial effects? Because to reduce its dependency on state budget? Because it is important to university graduates? Or what?
12. How successful is the university in diversifying its funding base? As compared to other universities? As compared to each faculties in the university?

Research Fund

13. As you know, the annual budget allocated for research work in the university is almost insignificant. On the contrary, one of the objectives of the university is ‘to increase the quality and quantity of research works in the university’. Do you think you can achieve this? What is the university planning and/or doing to stimulate and support research work in the university?
14. Do you think there is a reasonable financial autonomy in your university for faculties and departments as compared to previous times? Evidence?

Thank you very much for your invaluable time!!

Appendix B

INTERVIEW GUIDE

The interview guide is categorized into three groups based on the type of interviewees. The first interview is prepared for the two vice-presidents (Vice- presidents for academic and research and vice-president for business and development). The second interview is prepared for the three associate vice- presidents (associate vice-president for budget, plan and finance; associate vice-president for income generation and resource mobilization and associate vice-president for engineering faculty). And the third category of interview is prepared for the three deans (dean for college of business and economics, dean for college of natural sciences and dean for school of law). Below is presented the interview questions for Finance, Budget & Plan Associate Vice-President.

3. Interview Guide for Associate Vice- President (*Finance*, *Budget & Plan*)

Background of Respondents

Name:

Sex:

Administrative Position:

Academic Qualification:

Working Experience:

The Interview Questions:

Resource Allocation

1. In the process of budgeting from central government (MoFED), is the budget allocation corresponding to institutional activities and operations or already set centrally?
2. The annual budget you requested for 2002 E.C. (2009/10 G.C.) was 185,774,900 Birr; however, the budget granted is 128,382,000 Birr. There is a funding gap of

about 57,393,000 Birr. What do you say about this? What about the annual budget of the year 2002 E.C.?

3. Can you tell me the composition of the university budget of the year 2002 E.C.? like salary, etc
4. One of challenges in university finance and funding is misallocation of the available financial resources. How do you examine this in line with your university allocation mechanism?
5. Public universities are blamed for not having good financial management system as compared to private ones. Do you agree? What are your evidences?

Financial Constraints

6. Obviously, there is some amount of financial constraints from the above statistics. In your view, how significant is the financial constraints for public higher education in Ethiopia? And, how significant is the financial constraints for Bahir Dar University (BDU)?
7. What have been its major impacts? And what are your evidences for this?
8. How is this financial constraint affecting the fulfillment of institutional missions?

Income Generation

9. How is the university handling the basic institutional operations (missions) when there is not enough funding?
10. How is your university responding to this financial stringency?
11. Is your university trying to diversify the funding base? If so, how? And also, what are the different ways of generating income?
12. If the university is diversifying funding base, why is it doing so? Is it because to strengthen university's link with industry and corporations? Because of different financial effects? Because to reduce its dependency on state budget? Because it is important to university graduates? Or what?
13. How successful is the university in diversifying its funding base? As compared to other universities? As compared to each faculties in the university?

Research Fund

14. As you know, the annual budget allocated for research work in the university is almost insignificant. On the contrary, one of the objectives of the university is 'to increase the quality and quantity of research works in the university'. Do you think you can achieve this? What is the university planning and/or doing to stimulate and support research work in the university?
15. Do you think there is a reasonable financial autonomy in your university for faculties and departments as compared to previous times? Evidence?

Thank you very much for your invaluable time!!

Appendix C

INTERVIEW GUIDE

The interview guide is categorized into three groups based on the type of interviewees. The first interview is prepared for the two vice-presidents (Vice- presidents for academic and research and vice-president for business and development). The second interview is prepared for the three associate vice- presidents (associate vice-president for budget, plan and finance; associate vice-president for income generation and resource mobilization and associate vice-president for engineering faculty). And the third category of interview is prepared for the three deans (dean for college of business and economics, dean for college of natural sciences and dean for school of law). Below is presented the interview questions for Income Generation & Resource Mobilization Associate Vice-President.

4. Interview Guide for Associate Vice- President (*Income Generation*)

Background of Respondents

Name:

Sex:

Administrative Position:

Academic Qualification:

Working Experience:

The Interview Questions:

Resource Allocation

1. In the process of budgeting from central government (MoFED), is the budget allocation corresponding to institutional activities and operations or already set centrally?
2. The annual budget you requested for 2002 E.C. (2009/10 G.C.) was 185,774,900 Birr; however, the budget granted is 128,382,000 Birr. There is a funding gap of about 57,393,000 Birr. What do you say about this? What about the annual budget of the year 2002 E.C.?

3. How much revenue is needed by institutions of higher education to achieve the goals of closing the gaps?

Financial Constraints

4. Obviously, there is some amount of financial constraints from the above statistics. In your view, how significant is the financial constraints for public higher education in Ethiopia? And, how significant is the financial constraints for Bahir Dar University (BDU)?
5. What have been its major impacts? And what are your evidences for this?
6. How is this financial constraint affecting the fulfillment of institutional missions?

Income Generation

7. How is the university handling the basic institutional operations (missions) when there is not enough funding?
8. How is your university responding to this financial stringency?
9. What is the current contribution of private finance to higher education systems relative to the public sector?
10. Which aspect of the institutional operation do you think may benefit most from an increase in the role of private finance?
11. Is your university trying to diversify the funding base? If so, how? And also, what are the different ways of generating income?
12. If the university is diversifying funding base, why is it doing so? Is it because to strengthen university's link with industry and corporations? Because of different financial effects? Because to reduce its dependency on state budget? Because it is important to university graduates? Or what?
13. How successful is the university in diversifying its funding base? As compared to other universities? As compared to each faculties in the university?

Research Fund

14. As you know, the annual budget allocated for research work in the university is almost insignificant. On the contrary, one of the objectives of the university is 'to increase the quality and quantity of research works in the university'. Do you think

you can achieve this? What is the university planning and/or doing to stimulate and support research work in the university?

15. Do you think there is a reasonable financial autonomy in your university for faculties and departments as compared to previous times? Evidence?

Thank you very much for your invaluable time!!

Appendix D

INTERVIEW GUIDE

The interview guide is categorized into three groups based on the type of interviewees. The first interview is prepared for the two vice-presidents (Vice- presidents for academic and research and vice-president for business and development). The second interview is prepared for the three associate vice- presidents (associate vice-president for budget, plan and finance; associate vice-president for income generation and resource mobilization and associate vice-president for engineering faculty). And the third category of interview is prepared for the three deans (dean for college of business and economics, dean for college of natural sciences and dean for school of law). Below is presented the interview questions for Engineering Faculty Associate Vice-President.

2. Interviews for Associate Vice-President (*Engineering Faculty*)

Background of Respondents
Name:
Sex:
Administrative Position:
Academic Qualification:
Working Experience:

The Interview Questions:

Resource Allocation

1. In the process of budgeting from central government (MoFED), is the budget allocation corresponding to institutional activities and operations or already set centrally?
2. The annual budget you requested for 2002 E.C. (2009/10 G.C.) was 185,774,900 Birr; however, the budget granted is 128,382,000 Birr. There is a funding gap of about 57,393,000 Birr. What do you say about this? What about the annual budget of the year 2002 E.C.

Financial Constraints

3. Based on the federal government document, there is some funding gap in the annual budget allocated for the university. How is your faculty handling the missions/institutional operations when not enough funding? When there is big funding gap?
4. Obviously, there is some amount of financial constraints from the above statistics. In your view, how significant is the financial constraints for Bahir Dar University (BDU) and for engineering faculty which requires large amount of money as compared to other faculties (social sciences, FBE, etc)?
5. What have been its major impacts? And what are your evidences for this?
6. How is this financial constraint affecting the fulfillment of institutional missions?

Income Generation

7. How is your university responding to this financial stringency?
8. Do you have any workable plan to increase the funds for research in order to make your faculty (university) more competitive in science and technology?
9. Your faculty (Engineering faculty) can have lots of external university-industry linkage to enhance its finance, research work, etc. How do you describe your faculty about its university-industry link?
10. Is your university trying to diversify the funding base? If so, how? And also, what are the different ways of generating income?
11. If the university is diversifying funding base, why is it doing so? Is it because to strengthen university's link with industry and corporations? Because of different financial effects? Because to reduce its dependency on state budget? Because it is important to university graduates? Or what?
12. How successful is the university in diversifying its funding base? As compared to other universities? As compared to each faculties in the university?

Research Fund

13. As you know, the annual budget allocated for research work in the university is almost insignificant. On the contrary, one of the objectives of the university is 'to increase the quality and quantity of research works in the university'. Do you think

you can achieve this? What is the university planning and/or doing to stimulate and support research work in the university?

14. Do you think there is a reasonable financial autonomy in your university for faculties and departments as compared to previous times? Evidence?

Thank you very much for your invaluable time!!

Appendix E

INTERVIEW GUIDE

The interview guide is categorized into three groups based on the type of interviewees. The first interview is prepared for the two vice-presidents (Vice- presidents for academic and research and vice-president for business and development). The second interview is prepared for the three associate vice- presidents (associate vice-president for budget, plan and finance; associate vice-president for income generation and resource mobilization and associate vice-president for engineering faculty). And the third category of interview is prepared for the three deans (dean for college of business and economics, dean for college of natural sciences and dean for school of law). Below is presented the interview questions for Deans of Science College, Business & Economics College & Law School.

5. Interview Guide for Deans

Background of Respondents:
Name:
Sex:
Administrative Position:
Academic Qualification:
Working Experience:

The Interview Questions:

Resource Allocation

1. In your faculty, how is the available resource allocated internally for each department?
2. Why is the money distributed that way?
3. What is the reaction of each department about the fairness of the distribution of funds?

Financial Constraints

4. Based on the federal government document, there is some funding gap in the annual budget allocated for the university. How is your faculty handling the missions when not enough funding? When there is big funding gap?
5. How significant is this financial constraint in your faculty?
6. How do you see the problem of under funding in line with curtailing teaching learning and research activities?
7. To what extent is this financial limitation leading to emphasizing on teaching and sacrificing research? To what extent is emphasizing quantity and sacrificing quality?
8. How is your faculty responding to this financial constraint? Or how is the faculty planning to reduce the funding gap/constraint in order to offer more and better quality education?

Income Generation

9. Does your faculty have a workable strategy of diversifying its funding bases? If so, what are the mechanisms? Why is it doing so?
10. Do you have any workable plan to increase the funds for research in order to make your faculty (university) more competitive science and technology?
11. How successful is the faculty in diversifying its funding base? As compared to the other faculties in the university?

Research Funding

12. As you know, the budget for research in the faculty as well as in the university is insignificant. What is your faculty doing to stimulate or support research work in the faculty?
13. There is a challenge to handle teachers research contract because of the insufficiency of research budget. Teachers are contracting researches individually with private sectors. What is your faculty doing about this?
14. In your view, how autonomous are departments in using their budget?

Thank you very much for your invaluable time!!

Appendix F

Document Analysis

The documents analysed were:

- Higher Education Proclamations No. 351/2003 & No. 650/2009
- Annual National Higher Education Budget by MoFED
- Institutional Expenditure or Allocation Document of Bahir Dar University for the years 2007/08 and 2008/09.
- Bahir Dar University Legislation of 2005.