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Secção Autónoma de Ciências Sociais, Jurídicas e Políticas (Social, Juridcal and Political Sciences)

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COST SHARING IN ETHIOPIA: AN ANALYSIS OF CHALLENGES AND PROSPECTS

PARTILHA DE CUSTOS NO ENSINO SUPERIOR NA ETHIÓPIA: UMA ANÁLISE DOS DESAFIOS E PERSPECTIVAS FUTURAS

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

Dedicated to my mother, Hanna Bekelle Beyene, a strong woman who has given up her own happiness to put (us) her children in a better place. For her support, prayer, encouragement, and constant love that sustained me throughout my life.

The juri

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Palavras-chave

Ensino superior; Financiamento; Partilha de custos; Empréstimos; Acesso; Etiópia

Resumo

O financiamento do ensino superior é um dos aspectos mais relevantes da análise económica dos sistemas de ensino superior. A importância deste tema tem sido enfatizada pelos constrangimentos financeiros observados quer em países desenvolvidos quer em vias de desenvolvimento, os quais suscitaram a discussão entre investigadores e agentes políticos sobre modos alternativos de suportar financeiramente o ensino superior. Neste trabalho são discutidos os fundamentos teóricos para o desenvolvimento de políticas de partilha de custos e os modos de partilhar esses custos, nomeadamente através de diversos sistemas de empréstimos. Pretende-se também analisar a relevância do contexto político e do grau de desenvolvimento sócio-económico e das implicações destes no sucesso relativo dessas medidas de medidas de partilha dos custos do ensino superior.

Estas questões serão analisadas tomando por objecto central deste estudo o sistema de ensino superior da Etiópia. o qual. Este sistema de ensino superior tem sido caracterizado pelo seu padrão de acesso elitista, pelo facto de tradicionalmente excluir a maioria dos potenciais estudantes que poderiam frequentar o sistema e assim contribuir para o desenvolvimento económico e social daquele país. Este sistema de ensino superior enfrenta actualmente um conjunto de desafios importantes, entre os quais se destacam os relativos ao seu modo de financiamento. Desde as medidas de reforma iniciadas em 1994, o sistema tem apresentado um conjunto de mudanças importantes. Umas das principais medidas constitui a adopção de políticas de partilha de custos, a qual se iniciou em 2003 com um conjunto de objectivos. Este estudo pretende analisar os desafios e as perspectivas futuras que se colocam a esta política de partilha custos no ensino superior na Etiópia, nomeadamente tomando em consideração as condições específicas daquele país.

keywords

Higher Education; Funding; Cost-sharing; Loans; Access; Ethiopia.

Abstract

Higher education finance is one of the main issues in the economic analysis of higher education systems. The financial difficulties witnessed in both developed and developing countries have led researchers and policy makers to discuss about different alternatives of sustaining higher education systems. In this study are discussed the basic theoretical foundations of cost sharing and the different forms of implementing it, namely through student loan systems. This study also aims at discussing the relevance of the political and socio-economic context for the relative success of the adoption of cost-sharing.

These aspects will be analysed by focusing in the Ethiopian higher education system. This system has been characterized by an elite enrolment pattern, since it has traditionally excluded the majority of potential students who could join the system and therefore contribute to the development of the country. The Ethiopian system has been facing a number of challenges throughout its recent history, and financing the sector is certainly one of the major ones. Since the reform measures that have started in 1994, that system of higher education has been going through a number of important developments. Cost sharing is one of the main policy changes and has been adopted in 2003 to meet a specific set of objectives. This study investigates the challenges and prospects of cost sharing in Ethiopia, namely by taking into consideration the political and social reality of the country.

Table of Content

TABLES

Chapter One: Introduction

The higher education sector is generally considered to have an important contribution for economic prosperity and social development, both for the individual and for the society at large (Johnstone, 2005). Higher education has been playing a major role in generating national productivity, producing trained and flexible labor force, social cohesion, appreciation of social diversity and cultural heritage, higher social mobility, lower criminal rates, increased capacity to adapt to new technologies and so on (Jongbloed and Vossensteyn, 2002; World Bank, 2002). Thus, institutions of higher education have a major responsibility for equipping individuals with advanced knowledge and skills required for various positions within the country. They also serve as conduits for the transfer, adaptation, and dissemination of knowledge generated elsewhere in the world, and they support government and business with advice and through consultancy services. In most countries, higher education institutions also play important development roles in the knowledge economy whereby production and distribution of goods and services are highly manipulated by technologies. And currently, higher education has been known as a way of implementing Millennium Development Goals (MDG) through its research and applied technology which will loosen poverty, improve food supply, to mention a few (Saint, 2004).

In this regard, higher education throughout the world and especially in developing countries like Ethiopia has been thrown into a wide increase of demand. Therefore, many of the higher education institutions in general and public universities in particular have been in pressure with increasing enrollments. As such, most of the national governments especially in most African countries have been in constraint of adjusting the budgets of public universities. This is because for a long period, the public universities have depended entirely on governments' financial assistance to meet most of their expenditures (Saint, 2004; World Bank, 1994). While governments are in constraint of adjusting public universities' budgets to meet the increasing demand, public budgets have remained limited. The population growth and the expansion of primary education also entail more finance for the education system. Though the population of children below 15 years of age has diminished over the last 20 years in developed countries, on the contrary it has increased considerably in the developing countries. Thus, the huge and steeply rising expenses began to outrun the capacities of most governmental treasuries making it impossible to keep up. Other compelling public needs like elementary and secondary education, HIV/AIDS, Malaria, unemployment, public health, public infrastructure and defense expanses do also compete with higher education for the limited government revenues. This is accompanied by increasing per-student cost, which further complicates the problems. If there is no incremental funding for the growing demand of higher education, it is difficult to expand access and improve quality and equity in higher education. As a result, many national governments have been forced to face this situation and to develop various strategies of financing to meet the growing demand (Vossensteyn, 2004).

Cost-sharing is among the most well known measures which are now being adopted by most African countries including Ethiopia, to face this complex situation. Cost-sharing or the shift of some of the higher education costs from governments to parents and/or students (Johnstone, 2005) also has been adopted by other African countries such as Kenya, Uganda, Tanzania, Ghana, Nigeria, Mozambique and South Africa, to mention few (Johnstone, 2004).

The Ethiopian higher education system has also passed through various administrative and financial difficulties since its existence. A major turning point regarding the cost of education in the history of Ethiopia however came in 1994. With a view to enhancing the role of the education sector to socio-economic development of the country, a new Education and Training Policy (ETP) has been adopted. The policies stress issues of quality and relevance in educational programs; improvement of the learning process towards a focus on students; improvement of management and leadership; introduction of financial diversification including income generation and cost-sharing by students; and improvement in the system of evaluation, monitoring, autonomy and accountability (Abebayehu and Johnstone, 2001). The policy became a binding and legal document with the ratification of Higher Education Proclamation by the Parliament in June 2003. Cost-sharing in Ethiopia has been implemented since 2003 with the objectives of generating non-governmental revenue, expanding access, and improving equity and quality in higher education. Even though the 1994 policy reform deals with a number of issues related to higher education, the focus of this analysis/thesis will be only on cost-sharing.

1.2 Statement of the Problem

Though Ethiopia has more than fifty years of modern higher education experience, starting from 1950s, the higher education system has been extremely reserved for the few. There were less than 1,000 students and 50 teachers in 1950 in the Addis Ababa University, which was the only university in Ethiopia at the time (Ministry of Education, 2003). After a period of five decades, the higher education sector has not shown a significant improvement in terms of access and quality. The gross enrollment ratio is still very low, which places among the lowest ranking countries of the world, even in comparison with tertiary level gross enrollment ratio for Sub-Saharan Africa (Teshome, 2003). Though the number of higher educational institution has grown both in the public and private sector in recent years, the participation rate is one of the lowest in the world even below average of Sub-Saharan African countries (Bloom, 2005). The higher education system in Ethiopia has also been characterized by several other problems such as limitations in its autonomy, shortage of experienced academic staff, declining educational quality, huge brain drain, deficiency of adequate finance, weakness in its research output and poor connection with the intellectual currents of the international higher education community (Teshome, 2003). Despite the financial difficulties, higher education was totally free in Ethiopia until 2003. The government provided virtually all of the financing used to run the public tertiary system. This included instructional costs and the provision of free non-academic services to regular students; meals, lodging and healthcare (Teshome, 2007a).

To address some of these problems the government has implemented a financial diversification strategy through cost-sharing. The policy has been implemented in the form of income contingent loans (EPRDF, 2003a). The income contingent scheme has shown a significant success in one of the developed countries- Australia (Chapman, 2005). However, several authors have acknowledged the possible challenges this policy may face in the implementation process when applying in developing courtiers. Despite the possible challenges, the Ethiopian government is investing a huge amount of money and expanding the system, hoping the repayment will generate non-governmental revenue in the future and that the policy will work well. The share of higher education in the education budget is hugely expanding (Teshome, 2007a). The number of higher educational institutions is also increasing to include more students into the system (Ministry of Education, 2007). Most of the initial funds come from the World Bank in the form of loan and the rest from donors and government treasury (Teshome, 2007a). Even though the policy has shown a relative success elsewhere, since the adoption of the policy in Ethiopia in 2003 there have been different discussions and debates both among academicians and politicians. The analysis of whether the policy will be successful or not in countries like Ethiopia is the focus of this study. Although, its main objective in most cases is generating non- governmental revenue needed for financing higher education, these cost-sharing policies have raised serious concerns about the challenges and problems they may face in implementing the policy especially in developing countries like Ethiopia (Saint, 2004).

1.3 Objectives of the Study

The policy of cost-sharing in Ethiopia has set specific goals to achieve in the course of its implementation. Among other things, generating non-governmental revenue, expanding access, and improving quality and equity are the major ones. There are also theories and explanations about cost-sharing and its implementation processes made by different scholars. The objectives of this study are:

- analyzing the policy of cost-sharing in Ethiopia, exploring the challenges it may face in the implementation processes and
- Putting out the prospect it may have if it is properly implemented according to the theories and general principles

1.4 Research Questions

In order to achieve the above research objectives, the following research questions are central to the study:

1) What are the theoretical and policy rationales or motives for adopting cost-sharing in Ethiopia?
2) How is it working towards achieving the very objectives of cost-sharing?
3) What kind of cost-sharing scheme would be more adequate in developing countries like Ethiopia?
4) What are the prospects of cost-sharing in Ethiopia in addressing the financial challenges the system is facing?
5) What are the possible challenges it may face in the implementation processes and possible solutions?
6) How does cost-sharing affect access in higher education in Ethiopia?

1.5 Methodology

Research may be defined as the application of the scientific method in the study of problems (Blaikie, 2000). A methodology defines how one will go about studying any phenomenon "*Methodologies cannot be true or false, only more or less useful*" (Silverman, 2005:99). A researcher who writes on methodological issues finds it helpful to distinguish between quantitative and qualitative researches. Quantitative research emphasizes on statistics and quantification in the process of collecting and analyzing data. In contrast, qualitative research is descriptive in nature and its emphasis on data collection and analysis focuses on words rather than statistics and quantifications and none of these strategies have been seen to be superior to the other (Creswell, 1994; Bryman, 2001; Silverman, 2005; Berg, 2007). Considering the topic of this research and the main objectives of the study, the researcher has found it relevant to use qualitative research method for this particular study. This is because as the title of the research implies, the objective of the study is to analyze the policy documents according to theoretical frameworks of analysis which could be relevant to the study. Since it is a policy analysis, it is not limited to rigid definable variables, instead, it uses more of subjective information that may not be possible to quantify.

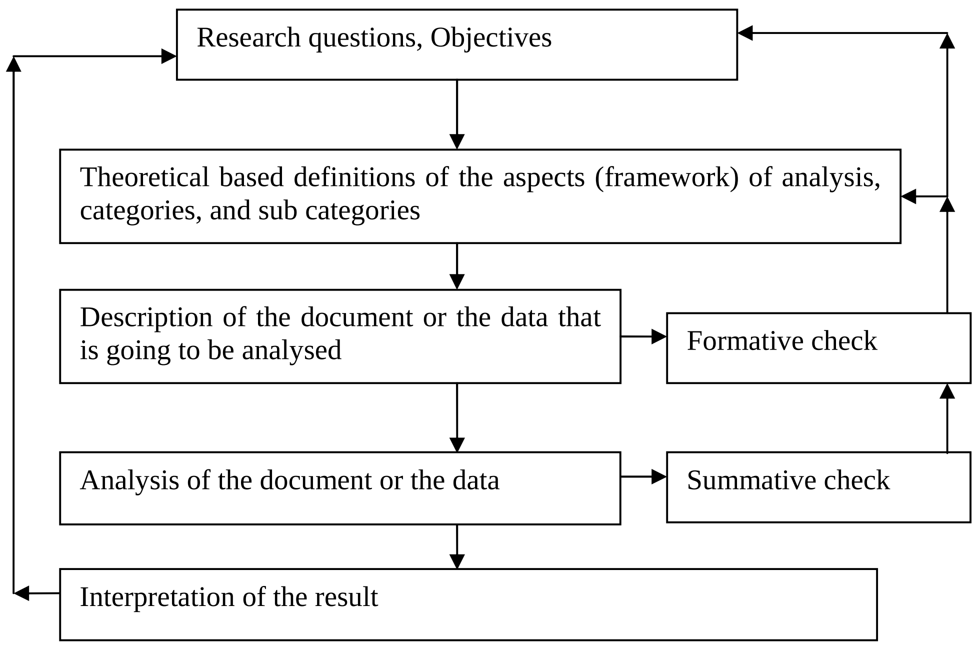
As Blaikie (2000) points out, the data used in social science researches can be at least of two main types. These are, primary data which is first hand data directly collected by the researcher through various data collection mechanisms and secondary data, which could be raw data that have already been collected by someone else, either for some general information purpose, such as government census or other official statistical records or for specific research projects or are data that have been analyzed either by the researcher who generate them or by an analyst of secondary data. In this case, the raw data may not be available but only the results of its analysis. This research is based on secondary data, government census or other official statistics, international and national documents, the Higher Education Proclamation No.351/2003 and Ministers Regulation on cost-sharing No.91/2003

Though there are different ways of qualitative research methods, like participant observation, in-depth interview or focus group analysis, this research is a qualitative document analysis. According to Mayring (2000), document analysis can be used for both quantitative and qualitative data analyses. In the case of quantitative analysis**,** it is used to collect information from a written document through counting or recording the repetitiveness of the significant words or related words or expressions for the study. However, document or content analysis is not only analyzing the manifested content of the document, as its name suggests, but also the themes, the context, and implications of the documents "*It is the use of replicable and valid method for making specific inferences from text to other states or properties of its source*" (Ibid). Thus, in the case of qualitative analysis, the focus is on the content or the message that the text carries; the aim is to build a model to describe the phenomenon in a conceptual form.

According to Satu and Kyngäs (2008), qualitative content analysis can be inductive or deductive. Inductive content analysis tends to be more used in cases where there are no previous studies dealing with the phenomenon or when they are fragmented. The concepts are derived from the data in inductive content analysis. Deductive content analysis is more frequently used when the structure of analysis is operationalized on the basis of previous knowledge or if the general aim is to test a previous theory in a different situation or to compare categories at different time periods.

In this respect, this research uses deductive qualitative document analysis. This is because, the objectives of the study are to analyze and evaluate the already existing policy documents of cost-sharing in Ethiopia based on theories and principles as frameworks of analysis and point out the possible challenges and prospects. Deductive document analysis constitutes of some basic steps which this research also uses. These basic steps are explained by Philipp Mayring as follows:

Model of Deductive Qualitative Document Analysis



Source: Mayring, Philipp (2000)

First, a set of questions that seek answers have to be explained, then, basic theories or frameworks of analysis have to be discussed. Here the theories and analytical frameworks have to be specific and designed to analyze a set of research problems at stake. Then the documents have to be described and the description has to be in relevance to the purpose or objective of the study which is called formative check (Mayring, 2000). Based on the theoretical explanations and descriptions of the documents, the researcher analyzes the data to answer his/her research questions. The analysis has to be the summary of the research questions, theoretical frameworks, the descriptions of documents and other relevant data; this is called summative check (Ibid). Finally, the result of the study has to be interpreted. This is the model this research will be following. However, this model is not the absolute principle; instead, it is subjected to modifications depending on the subject of the study and the kind of research it is used for.

1.6 Organization of the Study

This study consists of five chapters. Following this introductory chapter, chapter two discusses some of the main theoretical issues surrounding the introduction of cost-sharing in higher education. The theories are presented and discussed in relation to the research problem. It deals with issues like challenges that higher education finance is facing, source of higher education finance, meaning of cost-sharing, the rationales for implementing cost-sharing, mechanisms of cost-sharing, cost-sharing and access, tuition policies and student loan and the experience of Sub-Saharan Africa. In order to analyze the theories that are explained in chapter two, chapter three deals with higher education in Ethiopia. It presents the higher education system of Ethiopia within which the policy has been adopted, its finances, and the reform agenda that have been going on since its existence. Chapter four further discuses the policy of cost-sharing in Ethiopia, dealing with issue like why it is implemented, how it is implemented, the challenges it is facing and its implications on access. This chapter is the analysis part where chapter two and three work together to investigate the challenges and the prospects the policy offers for the country. In order to summarize the findings of the study and suggest solutions for future actions, chapter five provides composite summary of the major findings and recommendations and it concludes by suggesting some possible solutions for further investigations of the phenomenon.

Thus, from the financial problems that the Ethiopian higher education system has been facing, and based on the theoretical expectations of higher education finance, this study drives a set of research questions in order to analyze the policy of cost-sharing in Ethiopia. The research method which is implemented for this purpose is qualitative deductive document analysis. The next chapter deals more with the theoretical foundation on which the analysis part is going to be based.

Chapter Two: Cost-Sharing In Higher Education

Higher education in recent years has become increasingly important, not only for individual benefits but also for societal benefits. It has been a crucial component for development of democratic civil societies, an engine of economic growth and a principal vehicle for the advancement of economic mobility and social justice. Moreover, the role it has in promoting greater social cohesion, trust in social institutions, democratic participation and open debate, and appreciation of diversity in gender, ethnicity, religion, and social class, has driven the attention of all stakeholders, government, students, parents (taxpayers) and philanthropists (Teixeira et al, 2006). Knowledge accumulation and application have become major factors in economic development, and are increasingly at the core of a country's competitive advantage in the global economy. The role of higher education in the construction of knowledge, economies and democratic societies is more influential than ever (World Bank, 2002).

But, in spite of all these benefits of higher education, and its core place in government treasury, the sector, in most countries, is suffering from financial austerity. This austerity, according to Johnstone (2004), is manifested in such problems as overcrowding, capacity limitations, declining faculty-student ratios, deteriorating physical plants and so on. Woodhall (2004) puts the challenges that higher education system facing nowadays as "*the twin pressures*." These are, according to him, financial austerity and rising demand which have actually become urgent issues especially in developing countries. Moreover, the increasing role of higher education in the global economy, along with other important objectives, including the pursuit of knowledge for its own sake also necessitates the expansion of the sector. This is because, to support growth, the higher education sector needs to be large enough, of high quality, and responsive to a rapidly changing external environment, plus as pointed out by Barr (2003), "*To support distributional objectives and social inclusion, access* *to higher education needs to be broad. Access also supports the growth objective, since no country can afford to waste talent*." (No page number[1])

To expand access and provide quality higher education, there is always a need for incremental funding. The number of potential students that need to join higher education has been increasing in both developing and developed countries for various reasons. Among other things, population growth in developing countries for example leads to a mass participation in primary education which creates a demand pressure on higher education enrollment. According to the population projection made by the World Bank in 1990, the population of Sub-Saharan Africa will increase by 105% by the end of 2025 (Kitaev, 1996), which is the biggest projection made so far. This definitely creates a demand pressure on higher education. Higher education degree also has a high value in the labor market for individuals, which also motivates people to aspire for higher education. In Organization for Economic Co-operation and Development (OECD) countries, for example, unemployment for university graduates is considerably lower than the average, and the salaries are remarkably greater for higher education graduates compared with people with lower educational levels (Mora and Vila 2003), the expansion of knowledge economy which needs to do things in scientific ways also claims more educated labor force.

In order to meet all these needs, however, the sector demands adequate and sustainable funding mechanism to invest on higher education. Traditionally higher education in most countries has been fully financed by the government, but for a couple of reasons, which this chapter will be explaining in detail later, the public sector could not keep up with the financial needs of higher education sector to expand access and improve or maintain quality of higher education. This condition necessitates the introduction of alternative source of funding (Teixeira et al, 2006). The first part of this chapter is going to look at the theoretical explanations for cost-sharing and attempts to answer the questions such as, why cost-sharing? Who has to share the cost? What are the possible alternatives or schemes of cost-sharing?

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1 "*Financing Higher Education: Comparing the Options*." Accessed in February, 2008 <http://econ.lse.ac.uk/staff/nb/barr_HE_option030610.pdf>

This chapter reviews existing theories, perspectives and approaches of cost-sharing as a conceptual framework of analysis based on different literatures. Though there are different ideas regarding higher education finance, this theoretical chapter limits its scope on those which are relevant to the study.

2.1 Challenges in Higher Education Finance

The high relevance of higher education for economic development and mobility, advancement of technology and democratic practices, is highly recognized in academic works of many higher education analysts. In our everyday life, we witness social problems being analyzed and solved with new solutions emanating from increasing knowledge and higher educational trainings (Armbruster, 2006). Higher education has never been more important than it is today in twenty-first century. It is central to an increasingly technological and knowledge-driven economy (Teixeira et al, 2006). In spite of its benefits and the high demand from the society, higher education almost every where is suffering from financial difficulties. This leads to the point where it becomes very difficult to survive only with governmental or tax generated revenue.

According to Johnstone (2005), this austerity is a function of at least three forces. First, the **demand pressure**: i.e., the increasing number of students that want some kind of higher educational experience. This can be a combination of different factors for developed and developing countries. In the case of developing countries, especially in Sub-Saharan Africa, the combination of high birthrates and increasing percentage of students completing secondary school and aspiring to have some form of higher educational experience, plus limited number of higher educational institutions as compared to the number of potential students[2] creates massive demand pressures on higher education systems without adequate fund. In the case of developed countries on the other hand, like OECD countries, the demand pressure may not be

[2] For example there had been only nine universities, with a total annual intake capacity of less than 36,000, for a population of about 70 million till 2003 in Ethiopia (MoE, 2003)

because of high birthrate or limited infrastructure[3]. The higher educational system in fact, in these countries has grown dramatically since 1960s (Teixeira et al, 2006). According to the elite-to-mass-to-universal typology made by Martin Trow in 1970s, most European higher education systems were already clearly mass systems in the Trow's scheme (Mora and Vila, 2003). The demand pressure in these countries is probably because of changing employment opportunities with high value of higher education degree in the labor market and a perception of increasing competition for these fewer "good" jobs which will be enhanced by higher education. This also could be because of the development of democratic values which lead an increasing regard for social and economic mobility and justice, leading to policies designed to increase higher educational participation, particularly among those traditionally less represented, such as ethnic and linguistic minorities, girls (in some cultures), or students from poor secondary schools or otherwise thought to be educationally deprived. Or, as pointed out by Mora and Vila (2003), because of the expansion of the classical Humboldtian University to more levels and to non-university sectors which focused on shorter programs, increase the academic drift towards longer courses, is also an *accelerating* factor, as first degree graduates perceive a need for even higher levels to be competitive (e.g. the growth of MBAs and other professional masters degrees) and as professions (especially licensed professions such as teachers, and the non-MD health professions) endeavor to raise their stature and limit the numbers allowed to practice[4]. All of the factors mentioned above are not exclusive of each other. The point here is there is a demand pressure on higher education but the extent defers from country to country. However, taking the high population growth, poor infrastructure, small size of the sector, and relative poverty into consideration, the demand pressure is more pronounced in developing countries than developed ones.

[3] "Many or possibly even most of the universities in the OECD countries have impressive physical plants – certainly by world standards – even though much of this physical capital is being slowly consumed through deferring critical maintenance." (Teixeira et al, 2006:4)

[4] The German *Fachhochschulen*, the Dutch higher vocational schools (HBOs), the French *Institutes Universitaires Technologies* (IUTs), and the American comprehensive colleges and universities and community colleges (Ibid).

Second, there is the high and likely to be **increased per-student cost** on top of the increasing number of students. Per-student or unit cost in higher education tends to be high throughout the world because of different factors. Among other things, higher education is an intensive user of highly skilled personnel, whose salaries should be competitive with the salaries of those with the same educational level and skill working in other sectors. In the competitive sector of the economy, technological changes are being introduced progressively in the production system. Consequently, productivity increases and salaries rise for highly skilled workers (Mora and Vila, 2003). Nevertheless, the production system in higher education uses the same basic technology (lecture, tutorials and so on). The productivity of the system does not improve substantially, but the cost, basically wages, rise at the same pace as in the other productive sectors. At the same time higher educational institutions also need to be equipped with modern technologies like computers, scientific equipments, and library materials which make the cost of higher education even higher especially in developing countries since there are more compelling needs (like HIV/AIDS, clean water, and other social services) that compete with higher education (Johnstone, 2005).

Third, there is the **decline in available public revenue** possibly because of increasing difficulty in taxation, or competition from other oftentimes more politically compelling public needs. This is a much more serious problem in developing countries since it is rarely possible to find strong tax collecting capacity from the government's side. Moreover, in many countries, individual incomes, business profits, and sales, on which so much taxation depends, are too easy to hide or similarly, too difficult to verify (Johnstone, 2005). Mora and Vila (2003) call this financial crisis as "*crisis of the welfare state*" which according to them has become imminent as a consequence of the strong competition for public funds from different social services in modern states. Just as the case in the above two factors however, the extent of the problem differs from developed to developing countries. In the developed countries, at least there are relatively sound tax systems and individuals' income is relatively verifiable. Thus, governments have a broader tax base as compared to developing countries. The other point mentioned by Johnstone and Woodhall (2002) is that, globalization and the enhanced mobility of capital, technology, and production facilities lead multinational goods producers to seek a combination of political stability, low wages, and low taxes, constraining the ability of countries to maintain high taxes and limiting the revenues able to be devoted to their public sectors, including their publicly financed universities (Woodhall, 2002).

Austerity affects both students and higher educational institutions. Its effect on higher educational institutions is manifested in various ways like weak institutional capacity to respond to change, loss of faculty motivation and morale due to declining salaries, inadequacy of equipments like computers, laboratory instruments and library materials, deterioration of physical plant, and inability to expand physical capacity to keep up with increasing enrollment and so on (Armbruster, 2006) . The impact of austerity on students on the other hand shows itself by limiting student enrollment especially from low and middle income families since they cannot afford private higher education. It also limits the opportunity to get quality higher education (Chapman, 1999). Thus, revenue diversification is a must remedy for austerity in higher education through the sharing of the cost of higher education among different parties.

"The true underlying cause of higher education's austerity is the result of the naturally diverging trajectories of expenditures and revenues: underlying costs that tend to increase naturally at a rate almost certainly greater, year in and year out, than the natural trajectory of available tax revenues" (Johnstone, 2006:4)

Generally, the extent of financial austerity is quite different among developed and developing countries. On both cost and revenue side the situation is more exacerbated in developing countries. On the cost side, such countries are the most likely to combine high birthrates with rising participation rates for potentially explosive enrollment pressures. And on the revenue side, these same countries are likely to be the ones that also combine the greatest difficulty in raising taxes with the most extensive and compelling competitors like public health, HIV/AIDS, elementary and secondary education, and public infrastructure needs for the limited public money available (Johnstone, 2006). Most researches indicate that cost-sharing and the diversification of revenue sources are near universal responses to financial austerity, along with a general trend towards mass participation in higher education *"…has to be solved either on the cost side – that is, through cutting waste and enhancing productivity – or on the* *revenue side – that is, through supplements to governmental, or tax-generated, revenue*." (Teixeira et al, 2006:7)

Different countries like the United States, Korea, Canada and New Zealand Australia, UK, Tanzania, Kenya, Uganda and Ethiopia, have already implemented some forms of cost-sharing as a response to the financial austerities their higher educations have been facing. The term cost-sharing refers to the process of recovering part of the expenditure incurred in the provision of any service from the beneficiaries of that service (Johnstone, 2004). In higher education, it is about shifting of at least some of the higher educational cost burden from government or taxpayers to parents and students (Ibid). It can be said that cost-sharing is a revenue diversification and generation policy that recognizes the need for beneficiaries of higher education to pay back part of the cost of their education in order to sustain the system (Obasi and Eboh, 2004). Johnstone (2006) pointed out four main bearers of higher educational costs: taxpayers, parents, students and philanthropists. Jongbloed's (2004) study indicates that in countries like United States, Korea, Canada and New Zealand, cost-sharing has already managed to generate substantial share of funding from alternative non-public source such as students, donations and other non-government sources[5]. Most of these countries had faced most of the challenges that many developing countries are facing now (Kitaev, 1996).

So far we have seen the basic challenges that higher education finance is facing. Among other things, demand pressure, increasing per-student cost and declining of available public revenue are the major causes of financial austerity in higher education which lead to cost-sharing. But what are the underlying rationales for adopting cost-sharing or for the shifting of at least some of the higher educational cost burdens from government/taxpayers to parents and students, as a solution for higher education austerity? This is what the next part of this chapter is going to address.

5 "*those countries that have been able to channel more than 2 % of GDP into tertiary education – the United States, Korea, Canada, and New Zealand – all raise a substantial share of funding from these alternative sources*." (Jongbloed, 2004: 1)

2.2 Rationales for Cost-Sharing in Higher Education

For a long time, higher education had been tuition free in most countries of the world. As described by Marcucci (2003) and Johnstone (2004), the argument for free higher education is based on several rationales. Among other things, advocates of free higher education argued that the social returns of higher education are very high; therefore, it has to be funded by the government. Moreover, education is (or should be) a fundamental right; it should be given free, because tuition fees may discourage the participation of students from low-income families, from rural areas or ethnic minorities which may have negative impacts in terms of social equality and social benefits (Barr, 2003). However, the high and rapidly rising costs of higher education and the increasingly limited public revenues, makes most governments willing and increasingly dependent on revenue supplementation. And worldwide, the most common approach to the need for increasing revenue is some form or forms of cost-sharing, or the shift of some of the higher educational per-student costs from governments and taxpayers to parents and students (Johnstone, 2004). The conventional rationales for cost-sharing and revenue diversification in higher education worldwide are three:

1-The Sheer Need for Other than Governmental Revenue for Greater Quality, Expanding Access and Participation. Barr (2003) in his study of comparing different options for financing UK's higher education argued that when higher education was an elite system with participation rates in single figures, maintaining a high-quality system out of taxation was not a problem. But, he said, this could not be the case if the system needs to expand access for a mass higher education. The reason is that with a mass system funding is constrained and so the substantial resources needed to promote access are crowded out by other elements in the higher education budget, and if places are scarce, middle-class students will tend to crowd out those from poorer backgrounds (Ibid). The proponents claim that public institutions of higher education must increasingly supplement their governmental revenue through cost-sharing and other revenue diversification mechanisms. This is because there is an increasing trend in decreasing public resources allocated to higher education sector, as compared to the overwhelming high demand pressure for higher education. This demand pressure especially in developing countries like Ethiopia, as we have seen above, is a function of demographic increases as well as the expansion in the traditional college age cohort to include non-traditional students, such as mature age entrants, compounded by the increasing number of secondary school graduates who are academically qualified and want to pursue higher education (Johnstone, 2006). Moreover, the decline in available tax-based public resources to higher education is compounded by competition of public higher education sector with other politically and socially compelling needs such as healthcare or clean water supply for public fund (Ibid). Thus, there is a need for other than governmental revenue to supplement public funding. In order to achieve the objectives of quality, efficiency and equity in terms of access in higher education, *"…increased private resources for higher education would seem to be the goal to be achieved*." (Jongbloed, 2006:1).

2-Greater Equity: from the above discussion about financial austerity, we can understand that the objective of higher education financing policy should be meeting the financial sufficiency of the system and on the way to improve efficiency with equity. According to Mora and Vila (2003), equity has two meanings. These are equal opportunities of access to higher education for people from any social class and a fair share of the cost of higher education among the beneficiaries of the service. We will discuss the first notion, the impact of cost-sharing on access, later. However, the notion of equity in a sense that those who benefit should at least share the cost, according to Johnstone (2004), is based on the fact that though higher education is actually paid for by all citizens, it has been enjoyed by a very disproportionate number of the society from middle, upper middle and upper income families who could and would pay at least a portion of the costs of instruction. As a result, there are potential students who would be excluded

> "*virtually all countries higher education is partaken of disproportionately by the sons and daughters of the more privileged, while the governmental revenue base supporting this expensive governmental benefit depends heavily on taxes that are born substantially (if not regressively) by the general taxpaying citizen*"(Ibid:1)

Chapman (1999) strengthens the above rationale pointing out two labels of equity, what he calls 'vertical equity' and 'horizontal equity'. He explains vertical equity as follows:

> *"If the government does not charge for higher education, the minorities who receive it are being subsidized by those who do not attend higher education... all taxpayers have paid for the gift of higher education, and it is equitable that those so advantaged pay in part an additional amount for the individual benefits they receive*." (Chapman, 1999: no page)

On the other hand he explains 'horizontal equity' in the following way:

> *“Imagine two people on identical high incomes, with one being talented at sport (or good at business), and the other being a higher education graduate. If they both pay the same tax this is horizontally inequitable because the former has subsidized the education of the later which has in turn increased her/his income. A second point concerning horizontal equity relates directly to the issue of graduates ‘paying’ for their education. That is, some opponents of graduates contributing to part of the cost of their education argue that this is unreasonable because the extra taxes that graduate pay more than cover the public subsidy involved.*” (Ibid)

Generally, equity reasons are based on the principle that higher education should be available to people with capacity, disregarding their economic resources, in order to increase the fairness in terms of access in the society. This could be attained if those who benefited from higher education share the cost. Then, the added revenue from cost-sharing can be reinvested to expand capacity, both for classroom instruction and for accommodations and thereby increasing participation. However, this fact may not always hold true unless the generated revenue from the beneficiaries are allocated to higher education.

3-Improved Efficiency: cost-sharing presumes to increase efficiency of systems and institutions as well as improved producer responsiveness to both the student and the society; it brings some of the virtues of market (Teixeira et al, 2006). Some kinds of tuition are expected to make students and families more rational consumers and the universities more cost conscious providers (Johnstone, 2006). The other virtue of market is that it produces responsiveness. The notion of producer responsiveness is premised on the assumption that cost-sharing through tuition and other related costs would make universities more responsive to the individual, societal, and labor market demands. The notion is that students and families who pay tuition fees may demand accountability and therefore, universities will be more consumers orientated and efficient. Obasi and Eboh (2004) also state that tuition fees represent a source of independent income for the institution and this may increase its autonomy and capacity for optimal resource allocation. And on the students’ part, they are compelled to carefully select their courses, minimize their time in school and become more responsive to changing labor market needs. In neo-liberal economic theory, where there is competition and cost to be borne by the consumer, there is a possibility of greater efficiency and responsiveness (Teixeira et al, 2006). However, unlike in a real market situation, the interaction between supply and demand in higher education does not take place through the operation of a price mechanism. Excess demand or excess supply may not be eliminated through adjustments in prices and the consequent adjustment of the quantities supplied or demanded. This is because, according to Jongbloed (2006), in most cases, students are paying relatively only small percentage of the total educational cost. And the larger share of financing higher education comes from the government, especially in developing countries since private contribution for higher education is a recent phenomenon. In such cases, the effective implementation of the market values in higher education will most likely largely depend on government’s policies and other legislative supports for the institutions and students. These legislative incentives could be provision of legal ground for institutions to recruit their own students, providing adequate information and the right of choice for the students so that they can make a rational decision. But in all cases, the introduction of some kind of tuition fee has a potential to bring market values into the higher education sector.

Apart from economic rationales, the need to diversify higher education fund is also a function of some political or ideological rationales. For example, taxes were relatively easy to collect in centrally controlled economies such as the former Soviet Union and Eastern Europe before the collapse of Communism, where purchasing power could be siphoned off at each level of the state owned production processes via turnover, or other forms of value-added taxes (Johnstone, 2006). In communism or command economy, the state could also control and thus tax all international trade. In such cases the state could have a more tax basis and could easily verify transactions. However, the shift from communism or command economy to mixed economy and liberal free market traditions have brought privatization and accelerated globalization which have essentially eliminated these largely invisible and easy–to-collect taxes, and the alternatives like, taxes on income, retail sales, property, and the sales of luxury goods which are visible, unpopular, expensive, relatively easy to avoid, and technically (in addition to politically) difficult to collect (Ibid).

Moreover, for the limited revenue collected from tax higher education may not enjoy relatively high priorities in politicians’ agenda in the face of other politically competing interests such as elementary and secondary education, public health, housing and public infrastructure, welfare and the social and economic safety net, and internal and external security (Barr, 2003).

The rationale for cost-sharing has been the subject of a large and contested body of economic and public finance theory. To summarize the rationales, it begins with the claim of greater equity. This claim, in turn, is based on the observation that in all countries higher education is partaken of disproportionately by the sons and daughters of the more privileged, while the governmental revenue base supporting this expensive governmental benefit depends heavily on taxes that are borne substantially by the general taxpaying citizen (Johnstone, 2003, 2004, 2006). Contribution for higher education also expected to brings the basic economic principles of efficiency and responsiveness both to the consumer and producer. But beyond the conventional claims of greater equity and efficiency, the observation is that the greatly increasing revenue needs of higher education, especially in countries where governmental revenue is so limited, enrollment pressures so intense, and competing public demands so great, make it a virtual imperative to supplement scarce governmental tax revenue with non-governmental revenue through some kind of cost-sharing. The basic preceding questions here are who should share the cost? And what are the possible mechanisms (or how) for implementing cost-sharing? These are the issues that the next part of this chapter will be discussing.

2.3 Sources of Higher Education Finance

Many researchers pointed out that the concept cost-sharing, in higher education, begins with an assumption that the costs of higher education being borne by four principal parties: the government or taxpayers; parents; students; and/or individual or institutional donors (Johnstone, 2004). Plus non-governmental revenue can also be generated from institutional entrepreneurship (Ibid, 2006). Next, each of the four parties of cost-sharing is going to be discussed in detail.

2.3.1 The Government or Taxpayers

The source of government funding is taxes collected from the general public. Taxes can be paid by most citizens directly and visibly, as in taxes upon earnings, property, retail sales, general consumption, or special goods such as gasoline, cigarettes, alcoholic beverages, airline travel, or imported goods. Or, taxes can be paid indirectly and largely invisibly. Such indirect taxes, largely invisible to the average citizen, may originate with taxes on businesses or enterprises that are passed on to consumers in the form of higher prices on the products they eventually buy (Johnstone, 2005, 2006). There are different reasons for why government should subsidize higher education. Oosterbeek (1998) argued that there are at least three major arguments supporting government subsidization of higher education. These are: positive externalities, capital market imperfections and equity considerations.

Positive Externalities: Though most economics argue that higher education is more of a private good, it is difficult to draw a clear boundary where the frontier between education as a public good and as a private one exactly is, because some of the public and private benefits are difficult to quantify and exactly measure to find out which one has the highest value. Thus, they tend to regard higher education as a quasi-public good (Kitaev, 1996). This is because it is not only individuals but also the society that drives extended benefits from higher education. These benefits are known as spillover benefits (Chapman, 1999); benefits a society indirectly drives form higher education. The societal returns from research are likely to be very high (Oosterbeek, 1998), for example. This could be getting solutions for the social problems a community has been facing or getting easy ways of doing things. In these respects, higher education has both monetary and non-monetary benefits to the society that can be good reason for the government to subsidize. The monetary benefits that society drives from higher education includes: higher national productivity, higher tax revenues, highly flexible labor force, higher consumption and less dependency on government. The non-monetary benefits include social cohesion, appreciation of social diversity and cultural heritage, higher social mobility, lower criminality rates, more donations and charity work, increased capacity to adapt to new technologies and so on (Jongbloed and Vossensteyn, 2002; World Bank 2002). In conclusion, it is not simple to accurately quantify the extent of spillover benefits from higher education, but if they exist, there is a rationale for some form of government subsidy to ensure that society receives the appropriate level of higher education investment

Capital Market Imperfections: Capital market imperfections refer to the fact that investments in higher education involve risks for students because they are uncertain about their abilities and future jobs so they may become risk averters, afraid to take loan. At the same time, in order to lend money banks need collateral as a guarantor. But not all students have the ability to present that. As a result, students may have difficulties in getting loans from private banks to pay the study costs (Oosterbeek, 1998). In other words, both students and banks will be reluctant to make human capital investments, which can undermine economic development in knowledge economy. Here there may be a need for governmental intervention. To prevent an underinvestment in education, governments may intervene, either by guaranteeing bank loans or by offering loans themselves (Barr, 2005).

Equity Considerations: From a lifetime equity position, public subsidies to students seem unfair because they will probably belong to the future group of above average earners. However, at the moment of attendance, it may be argued that public subsidies are needed in order to equalize entrance opportunities for potential students from different social-economic backgrounds. Otherwise, students from disadvantaged backgrounds may not enter higher education (Chapman, 1999). Thus, the government may also intervene in this case in subsidization of higher education. Though there are many other reasons that could be pointed out for government intervention for sharing the cost of higher education, from these following three perspectives; positive externalities, capital market imperfections and equity issues, we can understand that government still has a major role in higher education finance.

2.3.2 Parents

There are two contested arguments towards parental contribution in higher education finance.

The first one is parents should not be held responsible to share the higher education cost of their children. This is based on the idea that when students join higher educational institutions, they will be matured adult in most country's age standard. They are legally independent citizens at this stage. Thus, they have to be the only responsible body for their higher education. Moreover, students are the ones that drive direct personal benefits from the higher education and it has to be them who should pay for the services they receive. However, since most of the time students do not have the money to cover the higher education cost by themselves, while they are studying, some kind of loan system or other financial assistance mechanism has to be set at the time of study. But the repayment should be the responsibility of the students not their parents (Barr, 2001). For example in those countries with no tuition fees (the Scandinavian countries) or with deferred tuition policies (the Higher Education Contribution Scheme in Australia, the Graduate Endowment Scheme in Scotland and the Students' Allowance Scheme in New Zealand), there is the assumption that parents are not financially responsible for their children's higher education and that the children themselves cannot be expected to cover its cost while they are studying (Chapman, 2003).

The second assumption is that parents have to hold responsibility or should contribute for their children's higher education costs from their current income, or in part from past savings, or even in part through borrowing (Johnstone, 2005, 2006). Grandparents or other members of an extended family, or even members of a village or a church, can also be "parents" when it comes to supporting a student. Johnstone (2006) argues that most students are still, at least through their first degree, financially dependent children assuming no significant time lapse between the completion of secondary and the beginning of higher education. In this condition, unless there is other means of financing their higher education, it is parents' responsibility to cover their children's transportation, food, tuition and other costs. If the government or any other agent provides loan or any other support for the students, that means the government or the agent is sharing the burden of the cost which other wise would be paid by their parent's. In terms of receiving the loan or any financial assistance, it is not only the students but also the parents are the beneficiaries because they would be the ones who were going to cover the cost of their financially dependent child without this support. Thus, they have to contribute in repaying the loan or any share that the students are supposed to pay too. Moreover, it is assumed that the parents derive considerable satisfaction from the higher education of their children, and derive more satisfaction and even status from being able to place their children in the "best" university they can afford and that their children are able to get into. For example "*German parents are obligated by law, up to their officially-calculated means, to contribute to their children's costs of food and lodging (there are still no tuition fees), and they can be taken to court for the failure to do so*." (Ibid: 5). Thus, even though it is controversial to say that parents are legally responsible for their legally independent adult child, it is fair to say that they have a moral obligation to support their financially dependent child and contribute to the expenses associated with their children's higher educations. The necessity of parental contribution also differs from countries to countries based on different contexts[6].

However, as stated by Johnstone (2006) and Chapman (1999), there are two possible difficulties which need to be considered when it comes to parental contribution. These are difficulty of determining and verifying parental ability to contribute and the duration of the presumed obligation to contribute. Financial ability to contribute is a complex and elusive concept even with a high degree of willingness to comply (Ibid). Furthermore, income and asset are relatively easy to hide. The other thing is, for how many years or for how many degrees or through what levels of higher education does extended parental financial responsibility continue? What about the case of divorce and non-custodial parenthood (Johnstone, 2006)? Despite all these challenges however, parental contribution, if it is properly designed, plays a crucial role in higher education revenue diversification.

2.3.3 Students

The other party to share the burden of higher educational costs is the student, who can bear some of the costs mostly through loans or in some cases they may also engaged in part time jobs to supplement their expanses. The loans, in turn, can be paid back when the student has

[6] "Thus, a combination of wealth, relatively flat demographics (meaning high but relatively flat enrollments), a very progressive and technically successful tax system, and extensive and generally available student loans allow the Scandinavian countries to forego an officially expected parental contribution towards either the costs of instruction or the costs of student living." (Johnstone, 2006:5)

graduated and is employed, like any regular loan, in monthly installments, or repaid through deductions that the employer removes from the graduates' pay and forwards to the lender. Repayments can also be income contingent, or limited to a certain percentage of earnings. Or the graduate can also repay as a contribution assuming the money was borrowed from, and therefore owed to, the government through income surtax, or additional tax on income until the loan has been repaid, including the contracted percentage interest (Johnstone, 2006, Chapman, 1999 and Barr, 2005).

In one way or another, the notion that students should pay comes to existence because they drive personal benefits from higher education. They have to pay for what they have received from higher education. The human capital theory, as explained by Bloom, et al (2005), stresses that education enhances the knowledge and skills embodied in people, the benefits of education may be realized in terms increased production possibilities and reduce costs. In this respect, education increases labor productivity, improves the chance of employment and improves the chance of high labor market earnings. Thus, raising their human capital in turn implies higher salaries and a smaller chance of ending up unemployed (Mora and Vila, 2003). The personal benefits students drive from higher education are not only in the monetary forms like higher productivity and higher net earnings, better job opportunities, higher savings, personal and professional mobility but also non-monetary benefits, which include educational consumption, better labor conditions, higher personal status, higher job satisfaction, better health and life expectations, improved spending decisions, more hobbies and value of leisure, personal development and so on (Jongbloed and Vossensteyn, 2002; World Bank 2002).

As Woodhall (2006) described it, the theoretical justification for student contribution is that higher education is a profitable private investment, offering graduates high returns. It may be difficult to quantify each and every benefit that higher education provides for individuals because some of the benefits, especially the non-monetary benefits, are difficult to quantify and calculate. But there is a general consensus in most literatures of higher education finance that the private returns for individuals are greater than the social returns in the case of higher education, for the reasons mentioned above. Thus, student should share the cost of their higher education. Moreover, the contribution from students brings more money available to reinvest on higher education and gives potential students from poor families, who would otherwise be denied access to higher education on grounds of poverty, the chance to invest in their own future by providing them with financial aid when it is needed and allowing them to repay it when they can afford to do so.

2.3.4 Individual or Institutional Donors and Institutional Entrepreneurship

1- Donations and Contributions: These are individuals (parents, alumni, wealthier students) and/or institutions (donor foundations, international organizations like World Bank in case of developing countries for example and so on) whose contributions may go either toward improving the quality of the university, toward the overall institutional budget, or toward some students, in the form of grants or scholarships, presumably in substantial measure based on the students' financial need, or the students' and/or their parents' low income (Johnstone, 2006). Such kinds of contributions most of the time are based on the goodwill of the individuals or institutions. There is less binding agreement between the higher education institutions and these bodies as compared to that which exists between higher educational institutions with students and parents (Ibid).

2- Institutional Entrepreneurship: This is also an alternative to generate non-governmental source of funding through development of other activities to raise funds that can cross-subsidize teaching and research activities. As Johnstone (2006) argues, this could be from the sale or lease of university assets, or the sale of faculty expertise, whether in teaching or research or through contract research, teaching high demand courses or evening courses to non-degree students with substantial tuition fees, plus along with the above activities, higher educational institutions can also be engaged in generating income through what Burton Clark called " *third-stream income*" which includes cooperating with industrial companies, local governments, campus service fees and small business activities (Clark, 1998:108).

However, Johnstone (2006) and Clark (1998) pointed out that there is potential for entrepreneur activities to divert facility and institutional time and attention from the core mission and activities of the institution. According to Johnstone, there are some entrepreneur activities that enhance the universities' mission but there should be clear policies regarding the time that faculty are expected to be on the campus, in their offices or laboratories and available to their students and colleagues.

In the face of rapidly rising costs of higher education, countries are turning to forms of cost-sharing, by which portions of costs formerly borne predominantly or exclusively by government or taxpayers are increasingly shared by different parties but predominantly by parents and/or students as explained above. This has the potential both to increase higher educational accessibility and to allow some portion of the costs of instruction and of student maintenance, or costs of living, to be shifted from government to other parties. In this way cost-sharing at least in theory can provide additional revenue to higher education for the purposes of enhancing capacity, quality, and participation.

In this section of the chapter we have seen the major bearers of cost-haring in higher education. Governments, students and parents are the major participants of cost-sharing. But non-governmental revenue can also be generated from individual donors and entrepreneurial activities. This leads us to more questions like, what are the mechanisms of cost-sharing. How is it going to be implemented which is the concern of the next section.

2.4 Mechanisms of Cost-Sharing

2.4.1. Forms of Cost-Sharing

According to Johnstone (2007) cost-sharing, in most cases, is associated with tuition and with fees or user charges on governmentally or institutionally provided room and board. Marcucci and Johnstone have clearly described the difference between tuition and fees as follows: a tuition fee refers to a mandatory charge levied upon all students and/or their parents, covering some portion of instructional costs. A fee, on the other hand, refers to a charge levied to recover all or most of the expenses associated with particular institutionally provided goods or services, like costs of food and lodging, or of health and transportation services, that are frequently partaken of by some but not all students and that might, in other circumstances, be privately provided (Marcucci and Johnstone, 2007).

Cost-sharing in higher education can be carried out in different ways. As documented by Johnstone (2003, 2004, 2006), this shift may take the form of tuition fees being introduced where instruction was formerly free (as in many countries in Europe or in the post communist world) or being increased at rates well above the increase in underlying costs in countries where tuition has long been accepted (as in the United States, Canada, and many Asian countries). The shift could be through the imposition of other-than-tuition fees, or non-instructional fees, such as application, examination, graduation, service, technology or access fees or instructional fees that are restricted only to students who fall behind in their progress toward their degrees or similarly restricted to those who score below some cut-off on an entrance examination (Vossenteyn and De Jong, 2006). Another mechanism could be the elimination, diminution or even the inflationary erosion of maintenance grants, as in the UK (Woodhall and Richards, 2006). Moreover, by a shift in the mix of student assistance from non-repayable grant aid to repayable loan aid, and can be shifted even further by measures to improve student loan recovery rates via higher interest rates, less subsidization, and improved collection procedures (Woodhall and Richards (2006); Vossenteyn and De Jong (2006)). Finally, It could also take the form of a policy-induced shift from highly subsidized public institutions to much less subsidized, tuition-dependent private colleges and universities whether nonprofit or for-profit (Johnstone 2006).

In one or other forms however, the objectives of cost-sharing policies are to generate non-governmental revenue from students or/and parents which can be upfront and/or deferred in order to better keep up with the very rapidly rising costs of higher education, particularly in countries where governmental revenues probably cannot do well and to expand the quality of higher education, particularly in countries where quality may have diminished along with the available governmental revenues. Moreover, the financial austerity that higher education sector in most countries is facing hinders the expansion of the system, especially in developing countries. This situation also brings the issue of access, how to expand higher education so that equity would be served, in cost-sharing policy agenda. How are cost-sharing and access related? Is cost-sharing hinders access or expand access? These are some of the issues that next part is going to discuss.

2.4.2 Cost-Sharing and Access in Higher Education.

Different countries have different levels of higher education enrollment rate. In all cases however, there are fewer and fewer students on the more advanced and selective end of the higher education ladder (Barr, 2005). Some students are somehow selected or otherwise admitted into while others are somehow screened or selected out of advanced higher education (Johnstone, 2006). Accordingly, an investigation of the connection between cost-sharing and accessibility must examine the effect of greater higher educational costs passed on to students and families on the decision to apply to any higher educational institution or a particular program (like medicine, law engineering or humanities) or the likelihood of degree completion or going to more advanced levels of higher education or the combination of all factors (Ibid). Basically there are two somewhat contradictory agreements regarding the impact of cost-sharing on access.

The first and most popular argument is that, cost-sharing through charging tuition fees or increasing tuition fees will have a negative impact on enrollment rates especially for students from low socio-economic backgrounds (Johnstone, 2006). Research in this area in Australia, Canada, China, the Netherlands, New Zealand, the USA and UK (Johnstone, 2004, 2006; Vossensteyn, 2005; Chapman 1999) suggests that at the macro level, demand for higher education is relatively inelastic in the face of price increases. However this may not always be true even in these countries. For example, the same study indicates that there may be a corresponding change in the proportion of students enrolled from different socioeconomic groups in the case of the US and the United Kingdom where net price changes appear to have a greater effect on students from lower socio-economic classes. According to a study made by Heller (2001) in U.S. for example, the enrollment rate has increased at higher level as compare to the rising cost since 1970s driven by two factors: (1) an increase of 156 % in the number of “nontraditional” college attendees, students outside the coherent of 18 to 24 years old, (2) an increase of 32% in enrollment of 18 to 24 years old students, despite the demographic declines of 1980s. He reviews the American case of the 1970s to the 1990s. His major conclusion is that students are responsive to prices and that for every $100 increase in tuition price one would expect the participation rate to drop by about 0.7% point. He also added that particularly low-income students are more sensitive to tuition price levels than higher income students. But this is not the case in Australia and New Zealand where the introduction of tuition fees did not influence the composition of the student body (Marcucci and Johnstone, 2007)

As for other goods, incomes play a role in determining the demand for and affordability of higher education. All other things being equal, an individual from a higher-income family is more able to afford the price of a particular college than is someone from a lower-income family (Heller, 2001). However, Heller (2001) argued that accessibility is not only a function of price in the context of higher education, access has had different meanings. Historically, accessibility have included such components as *financial accessibility*: Does the student have financial resources necessary to attend college? *Geographic accessibility*: How far does a potential student have to travel to attend college? *Programmatic accessibility*: Is the academic program that the student wants available? *Cultural/social/physical accessibility*: Do precollege students receive the necessary encouragement and support to attend college from parents, families, peers, schools, and others? Do some policies (either de jure or de facto) prohibits or encourage the enrollment of students from particular groups, such as racial minorities, or older, nontraditional college students? Are there physical barriers to attendance, especially for students with disability that limits their mobility? He also pointed out the availability of financial aids like grants, scholarships and loans which keep up with the rising expenses of higher education and help students from middle and lower income families to attend higher education. Thus, increasing in the price of higher education may have impact on access but cannot be the only determinate factor.

The other argument suggests that, it is not cost-sharing that hinders access for higher education instead; it is the absence of cost-sharing that hinders access to higher education (Barr, 2005, Chapman, 1999). If there is no cost-sharing, there is no non-governmental revenue to supplement higher education financing; this limits the capacity and thus enrollments which then lead to rationing higher education. Generally by rationing higher educational places according to some measure of academic preparedness is almost certain to fall disproportionately on potential students from rural, ethnically and linguistically minority, and lower socio-economic families (Barr, 2005). The other point is, if higher educational institutions do not charge tuition and continue to admit more students, they will end up inevitably in deterioration of quality from crowded classrooms and overworked and/or distracted faculty which again highly affects the most disadvantaged groups who are so much less able to avail themselves of private or out of country alternatives (Chapman, 1999).

Rasmussen (2006) also pointed out that enrollment to higher education is not necessary a function of only tuition fees or some kind of cost-sharing. He made his conclusion based on the studies conducted in the American context and said that in addition to high cost and inadequate financial assistance, other factors like poor school preparation, discrimination, motivational deficits, the lack of role models or encouragement at home, and a variety of other psychological, sociological, cultural, economic, and structural variables all play a role in preventing greater numbers of low income students from attending university. For example, situational characteristics such as the home environment, role models they have in their community or family, peer effects, public policies and work opportunities, may determine students' aspiration for higher education. In such low motivational conditions, certain individuals and groups may possess greater levels of debt aversion, and thus exhibit hesitancy toward borrowing large sums of money to invest in higher education. For example, the study made in the US implies that, African Americans and low-income families are, relatively, less willing to assume financial risks, which leads them to avoid incurring debt as a means of financing university study. Here lack of interest or motivation is one of the points mention as a reason for low participation of the student in that section of the society (Rasmussen, 2006).

Callender (2006) also described academic attainment, aspiration of the students and lack of information and economic factors in light of higher education entry. According to him, the characteristic of academic attainment is a factor in the case of UK. Though the completion rate in school leaving age of between 17-18 has increased from 36% in 1979 to 73% in 2003 in UK, this rate varies considerably based on the family background (Ibid). In 2003, under half of the students whose parents' had "*routine*" jobs were in full time education at the age of 17, compared with 81% with parents in "*high profession jobs*". Aspiration and social factors also played a role in higher education access in UK (Ibid). Lack of information about the educational opportunities affects some groups from attending higher education. "*Many working class young people do not aspire to universities because they do not see it as a place for them*." (Ibid: 112). Economic factors are also playing a role in access to higher education. Here not only the direct cost of attending universities but also the opportunity cost in terms of lost earnings while at university, is a factor. Thus, it is difficult to conclude that only the presence or absence of cost-sharing that has effect on access.

In principle, both governmental revenues and tuition or any kind of grants and student loans should enhance both policy objectives of bringing additional revenue from cost-sharing and also minimize any negative or distorting effects of these increased cost burdens, or debt loads, on student enrollment behavior. Thus, the total policy mix should not only benefit the institutions with additional revenue, but should also address and compensate for any potentially negative effects of cost-sharing on higher educational aspirations and preparation; higher educational participation itself; choice of institution or program; and other significant life choices, such as further training and career (Teixeira et al, 2006). To avoid any negative effects that cost-sharing may bring on access, the tuition or any support system must be carefully designed to meet the interest of students from all socio-economic backgrounds. The next part is going to deal with tuition policies and their impacts on access.

2.4.3 Tuition Policies and the Issue of Access

Appropriate tuition policy and loan system is very important in addressing the issue of access in higher education. "*Cost-sharing cannot be implemented equitably without a functioning student loan program to make funds available to all students who need to borrow for their education, and without scholarship programs that guarantee necessary financial support to academically qualified poor students*…" (Woodhall, 2004:41). In order to uphold the principle of higher educational opportunity, or widespread accessibility, both student and parental contributions require considerable study on the context and applicability of the policy at given conditions (Barr, 2005). Parental contribution, for example, requires some measure of parental *means* or *need* test so that financial assistance or some kind of offset to tuition fees can be granted (Ibid). In most of the OECD countries, especially those that rely heavily on income taxes and have thus constructed clear systems of determining and verifying income from all sources (both earned from wages, salaries, commissions, and the like, and unearned from dividends, interest, and rents), parental means can be reasonably inferred from whatever income has been determined to be appropriately taxable. However, in countries with neither such highly developed systems nor such culture of tax compliance the determination of parental or family means and thus of the financial assistance required for a student to access higher education is difficult and subject to both error and misrepresentation (Teixeira et al, 2006). Thus, in order to expand access in higher education, appropriate mechanism of cost-sharing, which takes into consideration the socio-economic context of a particular country, has to be designed.

The issue of access is related to tuition policies - that is whether there is upfront fees, no fees or deferred fees- and the availability of student scholarship or grant or loan for those who cannot afford to pay (Johnstone, 2006). The types of tuition fee policy adopted by a country are highly related to the idea that parents have financial responsibility for their children's higher education or not. Up-front tuition is payable at the time of matriculation and thus most frequently paid for by parents, in so far as they are financially able. In this case, the proportion of tuition fee to be paid or the amount of financial assistance available depends on family income. This is the case, for example, in Austria, the Netherlands, South Africa and USA (Ibid).

As argued by Barr (2006), upfront fee may have efficiency and equity problems. Upfront fee is efficient if people can choose how to pay; in the same token, it is inefficient if people are forced to pay a significant part of the cost upfront. This is particularly true of tuition fees, which tend to be large and lumpy, since the student normally has to pay a term's fees in a single chunk at the start of term. Upfront charges are also inequitable in a sense that better off families can pay charges directly and even a cash strapped middle class parent can borrow on good terms using the family home as security. But students from poor backgrounds may not be able to pay upfront unless there is some kind of scholarship available for all needy ones (Ibid).

Tuition fee may also be deferred regardless of whether this deferred obligation, or loan, is to be repaid on a predetermined fixed schedule or on a schedule that is based on the graduate's later earnings or income. In those countries with no tuition fees like the case of Scandinavian countries or with deferred tuition policies as in the case of Australia and Ethiopia, there is the assumption that parents are not financially responsible for their children's higher education and that the children themselves cannot be expected to cover their cost while they are studying (Johnstone, 2006). In this case, tuition fee may have less impact on access since students are not expected to pay while they are studying.

Whether it is upfront or deferred, if tuition fees are not properly designed, they may end up working for the disadvantage of the student, and the higher education system in general. In the case of upfront fee, unless properly working, means tested mechanisms are setup to differentiate those who can pay upfront and who can't, and support those who cannot afford the upfront fees with scholarship or loan, the policy may hinder access for those students from poor socio-economic backgrounds. In the case of deferred tuition policy, even though it is a better way of dealing with the issue of access for a short time, since it does not require students to pay tuitions in the time of study, without properly designed repayment mechanisms, the policy may end up failing to generate the non-governmental revenue needed for expanding the system and access for the disadvantaged groups. Thus, properly designed tuition policy and student support system like loan and grant have to be put in place, in order to address the issue of equity. Though there are different loan systems, they all work in specific conditions and contexts. The following part of this chapter deals more about different forms of loans.

2.5 Student Loans: Types of Student Loan

The basic characteristic of all student loan schemes is that students are offered the chance to borrow money to help them finance tuition costs or living expenses. After completing their studies, graduates must repay the amount borrowed, with or without interest (Barr, 2006). Although all loan schemes share this basic characteristic, there are important differences in the way different programs are administered, particularly in terms of whether loan programs are operated by the government, independent agencies, banks, or higher education institutions; the level of interest charged, and whether this is subsidized; and the way in which repayments are collected i.e. whether loan repayments are fixed over a specific time period (mortgage-type loans), or whether graduates must repay a fixed proportion of their income each year until the loan is repaid (income-contingent loans) (Woodhall, 1992; Johnstone, 2004, 2006). Cost-sharing in the form of student loan can be classified as conventional (mortgage-type) loan, income consignment loan and graduate tax (Obasi and Eboh, 2004). And what Johnstone (2005) calls it hybrid loan system also included here.

2.5.1 Mortgage-Type or Fixed-Schedule Loan

In the case of conventional mortgage-type or fixed-schedule loan, The loan carries a rate of interest expressed as an annual percentage of the amount borrowed[7], a repayment period, and repayment terms, such as whether the payments are to be in equal monthly installments, or installments that begin small and increase over time, or some other arrangement that yields a stream of payments sufficient to pay it back the loan in regular payments at the contractual rate of interest (Johnstone, 2006). In other words, mortgage-style loan arrangements involve the borrower's repayments being made over a specified period of time. Usually no account is taken of changes in the borrower's circumstances over that period, either for better or for worse (Chapman, 1999). Most notably, a borrower is afforded no protection against having low income in the future; repayments are still due within the given period of time. The basic concern for a bank lending for human capital investments is that unlike many other investments, there is no saleable collateral in the event of default, such as would be the case for the housing capital market (Ibid).

Thus, Reuterberg and Svennson (1990); Barr (1990); Chapman, (1999), argued that the basic problem of mortgage-type borrowing for education is that the outcome is risky, since the future value of a degree is not immediately apparent. People borrow to finance a degree but they are not completely certain what they are purchasing especially if their parents did not attend higher education. Moreover, there is a risk of failing the course; and not all degrees lead to high private return (Barr, 1990). The risk is greatest for students from poorer backgrounds because, future job and earning opportunities may be less favorable for the poor, and fixed future repayments commit the debtor to repay an open-ended proportion of his income. In addition, the poor tend to be more risk averse than the well to do. To minimize the risk of low income students, most governments subsidize loans. But large subsidies undermine the

[7] which may be fixed or may vary according to some index such as the government's borrowing rate or the calculated annual rate of inflation

purpose of having the loan in the first place (Barr, 1990; Chapman, 1999). Therefore mortgage loans may deter access to the very groups that loans are intended to reach (Ibid). Because of the above criticisms of mortgage type loan, the critics suggested income contingent and graduate tax as an alternative means of loan or support system. Next, we will see how they differ from conventional loan type and address their criticisms.

2.5.2 Income Contingent or Income Repayment Loan

This is a kind of loan which makes the borrower repay some percentage of future earnings until the loan is repaid at the contractual rate of interest, subsidized or unsubsidized, or until the borrower has repaid for a maximum number of years (Johnstone, 2006). "*The borrower who has repaid the maximum number of years without paying off his or her loan at the contractual rate of interest is released from further obligations and thus granted a subsidy, or an effective grant.*" (Johnstone, 2003:7). In other words, income contingent schemes offer a form of 'default insurance', that is, the former student does not have to bear the costs of not being able to pay their debt. This is opposite to a mortgage-style loan, in which the costs of defaulting on the loan may be very high, in terms of being locked out of other capital markets, most notably housing, through the damage to a borrower's credit reputation (Chapman, 1999; Barr, 2006).

Here, the size of repayment is linked to the graduate's income. Income contingency thus limits debt burden in a given period, and also targets more subsidies to lower wage earners. Since high earners have to pay their loans more quickly, they benefit less from any subsidy low earners are able to repay more slowly, and therefore receive greater subsidies (Barr 1990). Johnstone (2003) pointed out three elements that are stipulated in the income contingent loan contracts. The first is, the percentage of income or earnings that must go to loan repayment which may be fixed for all income levels or progressive, increasing at higher incomes. The second thing is the stipulation of precisely what is to be counted as income and over what span of time. Is it actual taxable, or estimated gross and the third one is, the provision for release from further repayments which is generally either repayment at a contractual rate of interest or repayment for a maximum repayment period or until a maximum age (Johnstone, 2003). Sweden, Britain, South Africa, Australia, New Zealand, Ethiopia and other countries have implemented various forms of income contingent student loans (Ibid).

2.5.3 Graduate Tax

Graduate tax is a contribution, whereby the student, in return for government subsidization of higher education in the form of low or no tuition, becomes obligated to income surtax, generally for the rest of his or her earning lifetime (Johnstone, 2003). It is income surtax on university graduates, without the keeping of individual borrower accounts or "balances owed" (Woodhall, 1989). Graduates (or former students, more generally) agree to contribute a proportion of their incomes, say 3% per year, for a given length of time (which could be as long as a lifetime). In this case, contribution is not related to the cost, it is not based on the essence of cost-recovery. Graduate tax is simply a lifetime student contribution for the service they drive from higher education, which is collected through income tax (Chapman, 2005). Unlike income contingent loan system, which requires students to pay back only principal and interest if their incomes after graduation are high enough, in the case of graduate tax, prospective students are never presented with a fixed amount that must be contributed. Under the graduate tax, those students who get a greater financial return from their education also pay more for it, since the total amount to be contributed is not determined. In essence, the program would ask the public to take an equity interest in the success of its most talented scholars. Though income contingent and graduate tax have differences, since both repayments are payments levied on top of income tax, people often refer to them as the same[8]. However, income contingent loans and graduate taxes are conceptually different as explained above.

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8 It should be noted that there has never been, though the year 2003, a true operational *graduate tax* according to the definition just given; most references to graduate taxes actually refer to income contingent loans that do, in fact, maintain "balances owed." (Johnstone, 2003)

2.5.4 Comparing Forms of Cost-Sharing

Johnstone argued that, income contingent loan is frequently adopted not simply as ways for students to pay whatever portions of higher education cost, both instructional and student living costs but as alternatives to the so called upfront payment of tuition fees in most cases to be paid by parents. Thus, as an alternative to tuition fees, an income contingent deferred contribution radically shifts the very meaning of cost-sharing from a financial responsibility to be paid by both parents and students to a financial burden to be paid only by students or by taxpayers to the extent that the loans are not actually meant to be repaid (Johnstone, 2003, 2006).

Chapman (2005) on the other hand, argues that the very objective of cost-sharing is not only generating alternative income for higher education but also expanding access and participation of students to be competent enough in the knowledge economy. In this respect, income contingent repayment is much less likely to diminish the participation of the talented poor. And unlike means tested scholarship schemes excusing the payment of upfront fees for those from poor families, prospective students without scholarships and with ungenerous parents or partners, will not have a direct financial barrier to access the system. This must mean a waste of talent, and thus a national economic cost. Income contingent repayment arrangements avoid these problems because the nexus between current economic circumstances and access to the system does not exist with these approaches since income contingent repayment makes family economic status less relevant for the prospective student (Ibid).

Barr (2006) also argued that income contingent repayment is the correct approach compared to the normal loan arrangements designed to fix up the failure of capital markets as a solution to the lack of collateral in higher education investments. Barr stresses that government intervention in the case of income contingent loan, has the advantage of insurance and consumption smoothing. He highlights the possibility of the use of income contingent loans as a prospective risk instrument for the public sector. In many cases, income contingent loans can be thought of as public sector financial instruments designed to address aspects of so-called ‘market failure’.

Chapman supports Barr’s idea that income-contingent loan system can achieve a better balance between effective cost recovery and risk to the borrower than other programs. According to him, administration is generally simpler and cheaper because loan recovery is handled through existing collection mechanisms such as the income tax administration or the social security system. Income-contingent loans are also more equitable and satisfy more fully the ability-to-pay principle, since repayments are in direct proportion to a graduate’s income (Chapman, 1999).

However, Chapman and Barr’s arguments in favor of income contingent loan system face strong criticism, especially on their applicability in developing and transitional countries, from Johnstone (2006). According to Johnstone, the collection of income contingent loans may not be as easy as stipulated by its proponents. It depends totally on the government’s ability to track and to verify all sources of income for all borrowers for most of their earning lifetimes, which is exceedingly difficult and perhaps a practical impossibility in most developing and transitional countries. Taking the urgency for greater need of alternative non- governmental sources of funding into consideration, especially in developing countries, the mechanism of income contingent loan will almost certainly not provide significant cost recovery in most transitional and developing countries for the simple reason that most do not have effective and reliable systems for such collection at the point of wage and salary payments (Ibid).

Since it is difficult to trace and collect the incomes of those graduates employed in first and second jobs in the private sector or self-employed graduates, the government depends mainly on the repayment from civil servants and perhaps those employed by multinational corporations and some large private enterprises. This has negative consequences not only in terms of limiting the revenue gain mostly on the repayments from civil servants or those only in very large and visible private enterprises, but also it creates inequity and market distortions (Johnstone, 2006). He argued that if the income contingent loans are to provide additional revenue, the additional revenue will still have to come from government. But the principal rationale for cost-sharing or revenue supplementation, in the first place is, to provide non-governmental revenue because additional revenue for higher education from the taxpayers is thought to be so unlikely (Ibid).

Indeed, Chapman and Barr seem to agree on and acknowledge some of the challenges explained by Johnstone. Chapman for example said an income contingent loan approach requires a government to be able to do at least two things efficiently. First, individual students' incomes need to be recorded accurately over time. This requires a mechanism involving a unique income identification system. Second, there has to be an efficient collection mechanism (Chapman, 1999). But still income contingent loan system is the best mechanism of student loan ever for Chapman. As a conclusion Johnstone argued developing countries need the recovery as soon as possible. However, their low capacity to collect the tax, lack of infrastructure for the effective implementations of the scheme and the difficulty of tracing each graduate, make it very unlikely to achieve the very objective of cost-sharing in income contingent scheme. And he made a conclusion by saying: "*Cost- sharing in the form of income contingent loan obligation held by the government is better than no cost-sharing at all. But this form will not solve higher education's immediate revenue problems (in developing countries) because it does not provide significant amounts of new money*." (Johnstone, 2006)

2.5.5 Hybrid Loan System

Then Johnstone (2005) came up with a mixed or a combination of mortgage and income contingent loans which is called hybrid loan system. This is a mechanism which combines the basic or default obligation with a fixed schedule of payments that would be due unless the monthly or annual repayments exceeded some maximum percentage of monthly or annual earnings. "*Amounts owed on the original fixed schedule of repayments would be deferred and become due only at such a time as the earnings or income rose and the repayment obligation could once again be made within the maximum percent of income limit*." (Johnstone, 2005:10) Those borrowers experiencing low income due to unemployment would pay income contingently during these years, but they have to return to the fixed schedule of repayment obligations when they regain their employment and their earnings. But the problem is, as pointed out by Johnstone, borrowers who combined prolonged periods of unemployment or a low paying job with high initial indebtedness, might never get back on the fixed schedule (Ibid).

Johnstone (2005) also pointed out some of the advantages of hybrid loan system by citing Canada as an example. He argued that "*most borrowers in most years would repay on an administratively simpler fixed schedule, not requiring income verification...*" (Ibid) He also argued that borrowers would have the assurance that their repayments would never become burdensome, and that they would ultimately be forgiven some measure of their initial student indebtedness in the event that their higher education never pays off monetarily. However, these advantages are also part of the income contingent advantages and it is difficult to make a clear distinction (Ibid).

2.5.6 Factors for Effective Student Loan System

Theoretically speaking, student loans have the potential both to increase higher educational accessibility and to allow some portion of the costs of instruction or costs of living, to be shifted to students, to be paid as he or she enters the workforce. In this way, student loans, at least in theory, can provide additional revenue to higher education for the purposes of enhancing capacity, quality, and participation (Teixeira et al, 2006). However, not all people agree on the effectiveness of student loans. Critics of loans who usually advocate grants instead of loans argue that higher education is a profitable social investment and therefore should be financed from public, not private funds. They argue that loans are inefficient because of the complexity and high costs of administration, particularly the costs of collecting loan repayments, the risk of non-repayment if graduates are unable to repay due to unemployment, low earnings, or illness; or if they simply default by refusing to repay, emigrating, or disappearing, and the danger of distorting students' choices of subject or career by encouraging them to opt for high earnings rather than courses or jobs that may be socially valuable, but which offer low earning prospects (Woodhall, 2004).

Despite the arguments in favor or against cost-sharing and student loans, many countries have student loan policy to finance their higher education system and more countries are turning to student loan programs as a way to involve (or require) students to bear a portion of the costs of their higher education and to serve the nearly universal policy of expanding higher educational participation and provide revenue to higher education (Johnstone 2005; Woodhall 2002). This is because, the financial austerity that higher educational institutions are facing demands alternative non-governmental revenue, thus as we have seen above, the contribution from students and/or parents in cost-sharing plays a significant role in doing this. But at the same time, introducing tuition fees or any kind of cost-sharing policy may pose a threat on access to those from poor socio-economic backgrounds, thus loan may play a mediating role between these two objectives of cost-sharing. However, charging fees with the wrong collection system will mean that academic talent will be wasted if able but poor students can't access the system. The wrong charging system also means that being born with poor or ungenerous parents becomes a negative determinant of one's access to professional opportunities and success. Thus, having a workable and appropriate loan system is crucial for cost-sharing to be successful (Chapman, 1999).

Thus, to expand participation in higher education and shifting some costs to the student loan programs need to meet some basic preconditions. Student loans should be *generally available* to all academically prepared students who need a loan to pursue higher education studies, despite the wealth or creditworthiness of their parents or to their individual career and earning prospects. What follows from the above point is that, at least the maximum student loan amount should be *sufficient* to enable the student to participate in an appropriate form of higher education without unacceptable personal deprivation. *Sufficiency* also means the provision of adequate number of student loans to achieve the system's or country's goals for participation in higher education (Johnstone, 2006). Moreover, student loan programs would require some continuing *government subsidization* (Chapman, 1999). However, subsidization that goes beyond what is necessary to secure sufficient capitalization and maintain reasonable interest rates is revenue that has an opportunity cost in the forgoing of other competing expenditures, such as more grants, additional capacity, or higher quality of existing institutions of higher education (Johnstone, 2006). Finally, student loan has to be *Collectable* i.e., able to minimize default and other forms of non-repayment. In most cases, generally available student loans have a high incidence of non-repayment. But much of the high rate of default in many countries is attributable to bad lender practices, mainly by government agencies as lenders, and is thus, in theory, amenable to correction through a better legal framework and better lender practices (Johnstone 2006; Woodhall, 2002; Barr, 2006). These are theoretical principles and if implemented properly, they may lead to a successful implementation of loan system. Next, we will see how cost-sharing is implemented in some countries in Sub-Saharan Africa.

2.6 Cost-Sharing in Developing Countries: Some Examples from Sub-Saharan Africa

So far we have discussed different theories and mechanisms of cost-sharing and loan systems. All these theories and principles are, however, context sensitive. That means, they operate in different social, economic and political conditions. In developed western countries where there is relative wealth, infrastructural developments and well established institutional and bureaucratic setups, some of the above cost-sharing policies may not be as challenging as developing countries. Widening participation in higher education has become a global policy objective, underpinned by both economic and social imperatives[9]. Increasingly, more overt links are being made by the global polity between widening participation in higher education, wealth creation and poverty reduction (UNESCO, 1998; World Bank, 2002). The Millennium Development Goals (MDGs) set out to halve world poverty by 2015. This target seems remote

[9] Higher education is repeatedly positioned by the international community as a central site for facilitating the skills, knowledge and expertise that are essential to economic and social development in low-income countries (World Bank, 2002).

in Sub-Saharan Africa, where a third of the world's poorest people live and which has the highest levels of absolute poverty of any region in the world[10]. Forty-four percent of people in Sub-Saharan Africa live on less than $1 a day (UN, 2006).

TABLE 1

Country Indicators from 2006

	Total population in million	Population growth in %	GNI Per Capita in USD	No. of Public /private Unis.	Enrollment in public higher education
Sub-Saharan Countries	770.3	2.3	841.8		
Kenya	35.1	2.6	580.0	7/ 26	79, 735
Tanzania	39.5	2.6	350.0	11 /19	35, 831
Uganda	29.9	3.6	300.0	5/14 licensed	68,079(2004)
Ethiopia	72.7	2.0	180.6	21 /	36,511

The World Bank (2006) and their respective Ministries of Education

Sub-Saharan Africa is the only region in the world that has experienced an increase in absolute poverty since 1990, both in terms of the actual number of people, and in terms of the proportion of the population, living in absolute poverty. At present, Sub-Saharan Africa has the lowest life expectancy, the lowest combined enrollment rates for primary, secondary and tertiary education and the lowest Gross Domestic Product (GDP) per capita of any region in the world (UNDP, 2006). In order to draw lesson from other countries which have similar socio-economic and political conditions like Ethiopia, the next part is going to discus the financing of the higher education of some countries in Sub-Saharan African. Thus, next we will briefly see the cost-sharing mechanisms of three countries namely Tanzania, Kenya and Uganda.

10 Sub-Saharan Africa is a geographical term used to describe the area of the African continent which lies south of the Sahara, or those African countries which are fully or partially located south of the Sahara, Rwanda, Eretria, Somalia, Burundi, Kenya, Tanzania, Uganda, Ethiopia are some of the countries which belongs to this region (Ibid).

2.6.1 Tanzania

Tanzania attained her political independence from the United Kingdom on December 9th 1961. The population of Tanzania is 39.5 million with 2.6 % of annual population growth rate in 2006 (World Bank, 2006). Tanzania has a dual system of post-secondary education which is categorized as university education and non-university education. Non- university education institutions train, prepare, and produce middle level professionals in different occupations, usually not requiring a university degree as a basic entry qualification (Johnstone and M. Ishengoma, 2004). Higher education institutions, usually universities, university colleges, and institutes train high-level manpower for occupations requiring a university degree or equivalent as a basic entry qualification in a profession. There are currently 11 public universities and university colleges and 19 private universities and colleges (table 1). The 2004 higher education gross enrollment ratio was 1%, compared to 3 % in Kenya and Uganda (UNESCO Global Education Statistics). In the 2006-07 academic year, total enrollment in public universities was 35,831 students (table 1), total enrollment in private universities was 5,275 and enrollment in other tertiary institutions was 11,735 (Johnstone and M. Ishengoma, 2004).

After Tanzania gets its independence in 1961, students in public higher education institutions were paying tuition fees until 1964. During this time, however, students from poor families were assisted by government bursaries. The bursaries disguised in the form of income contingent loans, whereby repayment were through deductions from monthly salaries upon graduation and subsequently guaranteed employment in the civil service and other public sectors (URT, 1998: 75). This program did not last long and it collapsed in 1974. It did not work because of lack of supervision and commitment from both the government and the students (Mkude et al., 2003; Samoff, 1990). In 1974, the Government abolished the bursary system and took all the responsibilities of paying all the costs of public higher education. This year also marked the abolition of school fees at all levels of public education. It was in the 1980’s that cost-sharing in higher education was officially reinstated due to the severe economic crisis as part of wide-ranging economic and social reforms under the IMF/World

Bank sponsored Structural Adjustment Programs (SAPS), and largely due to the Government's severely decreasing ability to finance public higher education (Johnstone and M. Ishengoma, 2004). In 1988, the government first adopted cost-sharing policy in higher education and made formal announcement of the policy in January 1992. Maintaining the quality of academic programs, improving access to higher education, and supplementing government fiscal expenditures in public higher education were among the rationales for the introduction of cost-sharing in Tanzania (URT, 1998: 76).

The implementation of cost-sharing in higher education in Tanzania has gone through three phases so far. The first phase became operational in the academic year 1992/93. In this phase, students were required to pay for their own transportation costs from their places of domiciles to their respective higher education institutions. In addition, students were also required to pay for the following items: money for covering breakages and loss of institution's properties, registration and application fees and student union membership and entry examination fees (Mkude et al, 2003; Samoff, 1990). Phase two of the cost-sharing policy was implemented during 1993/94 academic year. In this phase, students were required to pay for the following direct costs: food and accommodation through the interest free income contingent loans guaranteed by the Government for every student admitted in public higher education institutions under its sponsorship. Also, during this phase, an out-of-pocket allowance paid to every student admitted under Government sponsorship in public higher education institutions was eliminated (Mkude et al, 2003; Samoff, 1990). In phase three, following the establishment of the Loans Board in 2004/2005, students/parents were obliged to pay for food and accommodation, tuition fees, stationary, special faculty requirements, books, field practice expenses and medical insurance under the loan basis. With the establishment of Higher Education Students Loans Board (HESLB) under the Act no. 9 of 2004, the responsibility for control and management of student loan has been transferred from the Ministry to an autonomous body (HESLB). The functions of the HESLB include control and management of loan funds, administering and supervising the whole process of payment and repayment of loans and formulating the mechanism for determining eligible students (Ibid).

The criteria for securing a loan are based on two criteria which include academic excellence, i.e. for students who had achieved outstanding academic results and whose A-level academic scores for the physical sciences are between 6 to 15 points or 8 to 15 points for humanities. The academic scores are derived as follows: A = 5, B = 4, C =3, D = 2, E = 1, S = 0.5 and F = 0 (HESLB, 2006). And another criteria is, financial status, i.e. socially disadvantaged/needy students, who have been identified in the loans regulations as orphans, disabled or with disabled parents, from poor or single parent families, from marginalized and disadvantaged groups, and low income threshold families (minimum wage or below) (HESLB, undated)

The Loans Board has yet to setup a credible system to identify needs and get good performers who deserve loans (HESLB, undated). Repayment of the loans is left to the choice and commitment of the loan beneficiary who is supposed to select the manner of repayment – either through salary or through remittances in a bank (Ibid). The Loans Board however reserves the mandate to make a follow-up and to take alternative steps (within the law) for recovery of the loan which is expected to be paid back within 10 years, with a grace period of one year after graduation.

2.6.2 Uganda

Uganda attained her political independence from the United Kingdom on October 9th 1962. The population of Uganda is 29.9 million with 3.6 % of annual population growth rate in 2006 (table 1). Uganda follows a 7-4-2-4 model of education, with seven years of primary education, 4 years of lower secondary, 2 years of upper secondary, and 4 years of tertiary education. The public higher education sector is composed of universities, national teachers colleges, colleges of commerce, technical colleges, training institutions, and other tertiary institutions. There are 5 public universities and 23 private universities of which only 14 are licensed in Uganda (National Council for Higher Education 2004). The gross higher education enrollment ratio grew from 2.5 % in 1995 to 4.1% in 2004. Much of this growth is due to increased university enrollments, which have increased substantially since the 1970s. In 2004, there were a total of 108,295 students in higher education institutions; of these 68,079 were in universities (Ministry of Education and Sports, 2005).

Higher education in Uganda had been totally free for long time. But the austerity that faces higher education systems of other countries also handicapped the Ugandan higher education system. The economic and political crises that occurred in the subsequent years damaged the higher education system and created problems of financing, quality, and educational relevance (Musisi, 2003).This necessitated reform measures, which were undertaken in 1990s. The reform includes the adoption of alternative financing strategies, the offering of demand driven courses and administrative changes (Court, 1999). In 1992, the White Paper and Education Strategic Investment Plan (ESIP) recommended diversification of revenue through cost-sharing, private sponsorship, evening and weekend programs, and entrepreneurship ventures by public higher education institutions to supplement the declining governmental funding (Musisi, 2003).

The alternative cost-sharing scheme adopted by the Ugandan government is a dual track tuition policy. In such scheme, the government sponsors only about one quarter of the total university entrants. These students are fully financed by the government including their tuition fees, room and board (Musisi, 2003). But they attend only public universities. The two rationales given for this policy are provided that it meets the needs of the national economy and it addresses the issue of equity in higher education (UTESR, 2003). The students that do not receive government sponsorship have to finance their own education. Those students who score above a certain grade point cut off on the Ugandan Advanced Certificate of Education Examination (UACE) attend higher education institutions at no cost, while those who score below this threshold can enroll in universities but only if they pay for themselves (Ibid). For example, 80% of Makerere University’s students pay tuition, which accounts for more than half of the University’s total revenue (Nakanyike and Nansozi, 2003). There is an affirmative action policy, which adds additional 1.5-4 points to a student’s scores, is also in place for women, applicants with disabilities, talented athletes, and the children of Makerere employees. Students who do not get a government scholarship are invited to put in applications under the

Private Entry Scheme (PES). Some students who get government scholarships for a program that was not their first choice reapply under PES. At Makerere, where programs are offered during the day and evenings, the higher performing students are put in the day programs, where they study together with the publicly-sponsored students.

There are no legal limitations on the number of privately-sponsored students that are allowed in the institutions, but the government-sponsored students have first priority. The level of tuition fees for the private entry scheme students are set by the faculty, subject to approval by the Academic Senate and the University Council. Fee levels vary, and science faculties tend to charge more than the humanities. Tuition fees average about US$948 per year. Tuition fees are collected by the university's Bursar's office that retains part of it for university-wide activities like supplementing staff salaries, staff development, and research and sends the remainder to the income generating units (faculties and institutes.) The distribution amounts are set by the University Council and vary with the type of program (day, evening, etc.) that runs the program. Each faculty has some discretion over how it spends its own income subject to approval by the University Council with over 90 % of it going to recurrent expenditures and salaries (Carrol 2004).

The dual track tuition policy in Uganda has been successful in terms of generating significant revenue. For example, 80% of Makerere University's students pay tuition, which accounts for more than half of the University's total revenue (Nakanyike and Nansozi, 2003). However, the fact that Uganda does not have a sound financial aid program or loan system in place makes the system more problematic in addressing the question of equity and access. In 2003 tuition per semester for fee-paying students was about $300 against an average per capita income of US$300 (Kasozi, 2003). Without student loans, scholarships or grants, the majority of Ugandans who live on less than US$1 a day cannot access higher education. The government, however, has a plan to establish a student loan program by the year 2007 (MoE, 2003).

2.6.3 Kenya

Kenya attained her political independence from the United Kingdom on December 12th 1963. The population of Kenya is 35.1 million with 2.6 % of annual population growth rate in 2006 (World Bank, 2006). After independence, the educational system in Kenya was structured after the British 7-4-2-3 model, with 7 years of primary schooling, 4 years of secondary education and 2 years of advanced secondary education to be eligible for the 3-year university bachelor's degree program. Since the 1980s, however, there has been a shift to follow the 8-4-4 model of the American system with 8 years of primary schooling followed by 4 years of secondary education and a 4-year bachelor's degree program (ICHEFAP, 2008). As of 2006, there were a total of 6 public universities and one University College and over 26 private universities and colleges with varying levels of accreditation (table 1). In 2006, about 79,735 students were enrolled in public universities of Kenya (UNESCO 2006). Higher education in Kenya also includes polytechnics, institutions of science and technology and diploma level teacher training colleges. Access into university institutions is highly competitive. In 2006 alone, a total of 58,000 students failed to get admission in the public universities out of the 68,000 that qualified [11](ICHEFAP, 2008).

The genesis of student loans in Kenya dates back to 1952, when the then British colonial governments setup the Higher Education Loans Fund (HELF) to assist those pursuing university educations outside East Africa (Otieno, 2004). After independence, like most African countries, higher education in Kenya was free, in which the government covered both tuition and living expenses (Weidman, 1995). The rationale for free higher education in Kenya was based among other things, on the country's desire to create highly trained manpower that could replace the departing colonial administrators. In return, graduates were bound to work in the public sector for a minimum of three years. However, economic difficulties, and increase in population, coupled with rising oil prices of 1973 (Cutter, 2001) and austerity in the public

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[11] Qualification is pegged on attaining the minimum cut off point (COP) of C+ with a relevant subject cluster achievement (meaning that for a student to enroll in Law, for instance, that student must pass a given group of subjects), though this has been raised on a yearly basis.

budget for higher education, together with the poor performance of the sector in promoting access and equity, has led the government of Kenya to introduce a mechanism for cost-sharing and user charges in higher education (ICHEFAP, 2008).

Well structured and new form of cost-sharing in Kenyan higher education, however, was introduced in 1991. Under this new premise of cost-sharing, students and/or their parents were required to cover both tuition and the cost of maintenance. A student loan program was also established to enable the needy students to access higher education institutions (Otieno, 2004). The scheme was reorganized resulting in the establishment of the Higher Education Loan Board (HELB) in 1995. Due to the fact that there were inadequate funds for all students applying for the loan, the Higher Education Loan Board (HELB) opted to use means testing to identify and target only the needy students (Ibid). The undergraduate student loan scheme covers about three quarters of the yearly higher education costs that must be born by the student and family. The loan has an interest rate which is currently set at 4 % per year. Once HELB determines that a student should be awarded a loan, the Loans Board pays the tuition cost directly to the university and the remaining loan funds to the student through his/her bank account for food and lodging costs and other living expenses (Ibid).

In addition to the loans, needy students also receive bursaries. The Ministry of Education disburses about 82 million each financial year to HELB (Ngolovoi, 2006). HELB identifies needy students through means testing and awards bursaries according to each student's level of need (Ngolovoi, 2006). Funds are paid directly to the universities towards tuition costs. While very modest tuition fees were introduced in public universities in Kenya in 1991, the generated resources were insufficient given the severely limited number of students. Therefore, a dual track tuition policy was introduced in 1998 through the self-sponsored programs. Dual track tuition policies are characterized by a highly restricted, "merit-based" entry to free or, as in the case of Kenya, very low cost higher education, while other applicants not so admitted are permitted entry on a fee-paying basis (Johnstone, 2004). Students who attain the prescribed Cut off Point (CoP) are admitted into the regular state supported programs by the Joints Admissions Board (JAB). Therefore, the JAB sets the entry cut off for government-sponsored students from year to year. If a greater proportion of the students have high passes in a particular year, the cut off will be higher and vice versa (Ngolovoi, 2006).

One of the reasons why the initial student loan program failed was because of its inability to recover loans (ICHEFAP, 2008). However, with the inception of HELB, loan recovery has been increasing over the years. This increase is a result of efficient record keeping, obligating employers through the use of the law to ensure repayment and also by cultivating a culture of repayment among loan recipients (Otieno, 2004). In addition, HELB works together with the Kenya Revenue Authority (KRA) and the National Health Insurance Fund (NHIF) to recover loans by identifying loan recipients who are working in both the private and public sector and mandating them to repay funds owed (Ngolovoi, 2006). Unemployment and emigration are some of the major obstacles to loan recovery (Ibid).

2.6.4 Some Reflections on Cost-Sharing Experience in Sub-Saharan Africa

So far we have seen briefly how cost-sharing is implemented in Tanzania, Uganda and Kenya. Traditionally higher education had been free in these countries with government covering the cost of higher education. Higher education has been limited for the few for long time with the participation rate of less than 5 % in these countries (Teshome, 2007a). These countries are also facing high birthrate and relatively high socio-economic difficulties, like HIV/AIDS, unemployment, civil wars, poor infrastructure etc. The effective implementation of cost-sharing policy means achieving the very objectives of the policy, expanding access and equity; improving quality and generating non-governmental money to accomplish the goals. Ethiopia is also one of the countries of Sub-Saharan Africa facing the same socio-economic and political challenges. As we will see in the next chapter, cost-sharing in Ethiopia is relatively a recent phenomenon started in 2003.

Thus, there are some lessons that can be drawn from these countries which have similar socio-economic challenges to Ethiopia, but have relatively more experience with cost-sharing policies. Among other things, the three phase implementation of cost-sharing policies or step by step imposition of different fees made by Tanzania has been pronounced as a politically acceptable and economically feasible way of adopting cost-sharing, especially in countries whereby free higher education has been the dominant norm for a long time. This way of implementing cost-sharing also enable to transfer not only instructional cost related to tuitions, but also other administrative and service fees like food and accommodation step by step. It also lets to draw lessons from one step to improve it in the next steps. Moreover, relatively high level of autonomy universities of Uganda enjoying in setting the level of tuitions and collecting the fees through university's Bursar's office, enable them to retain large share of the money generated from cost-sharing and use it for university-wide activities like supplementing staff salaries, staff development, and research activities. By doing so, the dual track tuition policy in Uganda has been successful in terms of generating significant revenue for the higher education sector. The combination of dual track tuition policy and means tested loan system adopted has also a potential to combine the need for generating non-governmental revenue with supporting those who cannot afford it by providing loans. The fact that loan is also collected by an independent body, Higher Education Loan Board (HELB) and supported by Kenya Revenue Authority (KRA), makes the loan recovery relatively better.

Despite these positive lessons that can be drawn from these countries, there are also some problems that need further studies. For example, in order to secure a loan as a student in the case of Tanzania, the student either has to be academically outstanding or financially poor or socially disadvantaged/needy as identified in the loans regulations as orphans, disabled or with disabled parents, from poor or single parent families, from marginalized and disadvantaged groups, and low income threshold families. This is not a universal loan which is available for all. This is also the case in Kenya. In the case of Tanzania and Kenya it may be also difficult to identify those who are financially needy because as it is explained above, it is difficult to verify and precisely identify incomes of families in developing countries. Thus, providing loan could be exposed for misappropriation and may fail to meet the intended objectives. The manner of the repayment of the loan, in the case of Tanzania, is not also clearly defined. It is left to the choice and commitment of the loan beneficiary to repay it, either through salary or remittances in a bank. Having flexible way of repayment is encouraging from the students' point of view because it gives them different alternatives. But this may lead to high default rate, since there is no precise way of determining which channel the beneficiary is following.

In the case of Uganda where the government sponsors only about one quarter of the total university entrants, the issue of access is still on the agenda. The government fully finances only 25% of students, covering their tuition fees, room and board. The students that do not receive government sponsorship have to finance their own education. Though there is an affirmative action policy, it is in place only for women, applicants with disabilities, talented athletes, and the children of Makerere employees. This is not enough to address the issue of equity in terms of access. To expand access, there is a need for student support system. However, Uganda does not have a sound financial aid program or loan system in place. This makes the system more problematic in addressing the question of equity and access. Generally lack of supervisions and commitment from the government and students, lack of clear and credible system of identifying needs, lack of sound financial aid program or loan system in place make the system more problematic in addressing the question of equity and access. However, the fact that adopting some kind of cost-sharing policy in order to supplement government revenue by itself can be seen as the first step towards great achievements of cost-sharing in the region.

2.6.5 Concluding Remarks

We have seen the challenges that higher education finance is facing and the rationales for adopting some kind of cost-sharing in order to address the challenges from the theoretical point of view. The government, students and/or parents are the ones in most cases that share the cost of higher education, but non-governmental revenue can also be generated from individuals or institutional donors and from entrepreneur activities. We have also seen different forms of cast sharing and the issue of access. One of the most common ways of student support apart from scholarship and grant is student loan system. There are two major types of student loan systems namely, mortgage type and income contingent loan and a hybrid of them. There is also another contribution scheme for higher education finance, which is called graduate tax. Though people use income contingent loan and graduate tax interchangeably, the fact is that they are conceptually different. To draw lessons from countries which have close socio-economic backgrounds like Ethiopia, the chapter also briefly discussed the cost-sharing schemes of Tanzania, Uganda and Kenya from Sub-Saharan countries. The main conclusion here is that cost-sharing can generate non-governmental revenue for higher education finance if it is properly designed taking the socio-economic conditions of the country into considerations. Having said these things, the next chapter deals with the Ethiopian higher education system and its structure, its reform agenda and how it is financed.

Chapter Three: Higher Education in Ethiopia

Higher education in Ethiopia is a recent phenomenon, which started only in 1950s. However it goes through a number of reforms and developments throughout these years. This chapter explains the higher education development, its stricture, the reform measures undertaken and how it is financed in Ethiopia.

3.1 General Information

Ethiopia is a country located in East Africa. It shares boundaries with Sudan in the west, Kenya in the south, Eritrea in the north, and Somalia in the east. It is the third largest country in the continent, covering a total of 1,127 square kilometers. With a population of 72 million and growing at an annual rate of 2.1% per year, Ethiopia is the second most populous country in Africa (World Bank Statistical Abstract 2006). Ethiopia's Gross Domestic Product (GDP) per capita is US$100; traditional peasant agriculture generates the income accounting for half of Ethiopia's GDP, 85% of exports and 80% of total employment. The industrial sector contributes only 10% to the GDP, 15% to the exports and employs only about 2% of the labor force (Ibid). Economic growth averaged about 5% per year over the period 1999/2000 to 2004/05 (MoE, 2005). Adjusting to population growth, average per capita incomes rose only by about 2.1% per year (Ibid). Recurrent drought and poverty, population increase, malaria and HIV/AIDS are the biggest challenges the country is facing at present. Approximately 59% of Ethiopian men and 29% of women are literate (Ibid). There are more than 78 ethnic groups and over 80 languages in Ethiopia, with more than 200 dialects spoken throughout the country. The official language is Amharic. The predominant religions of Ethiopia are Ethiopian Orthodox Christianity and the second one is Islam. Ethiopia uses the Julian Solar calendar, which is made up of 12 equal months of 30 days each and a 13th month consisting of five or six days, depending on the year. Following this unique calendar, right now 2008 in the Western world mean 2000 in Ethiopian calendar. Apart from its five-year occupation by the

Italians (1936–41), Ethiopia is known as the only country in Africa that has never been colonized (FMO Country Guide).

This chapter is going to describe the basics of the Ethiopian higher education system. Starting from 1950s to the present time, the Ethiopian higher education system has gone through a number of reform measures about which this chapter going to describe. The chapter starts with a brief background in general and goes through the higher education realities in particular.

3.2 The Development of Higher Education in Ethiopia

Education throughout history has contributed a lot for the growth and advancement of technology and science in general. The contribution of higher education is by far much important for constructing knowledge society (World Bank, 2003). Within the framework of higher education, universities have the central place in human development. *"…the university is, together with the church, the most time honored of all present-day macro-societal institutions"* (Wittrock, 1993:67). Ethiopia possesses a 1,700-year tradition of elite education linked to the Orthodox Church, but secular or modern higher education began with the founding of the University College of Addis Ababa on March 20, 1950 (Country Profile, by Habtamu[12]). The University College had less than 500 students and less than 40 teachers in the late 1950s. Most of the teachers were foreigners. The College of Agriculture and Mechanical Arts, College of Engineering in Addis Ababa, Institute of Building Technology, Gonder Public Health College, Theology College of Holy Trinity, Kotebe College of Teacher Education, and the Polytechnic Institute at Bahir Dar were opened in the 1960s (Teshome, 2003). During the following two decades, a number of specialized technical colleges were established. In their academic organization, they were somewhat more American and less British than higher education systems in the former British colonies of East Africa (Wagaw 1990). Expenditure on education was only 1.4 to 3 % of the gross national product (GNP)

[12] Accessed in February, 2008 <http://www.bc.edu/bc_org/avp/soe/cihe/inhea/profiles/Ethiopia.htm>

between 1968 and 1974, compared with the 2.5 to 6 % for other African countries during the same period (Damtew, 2005).

When a socialist military regime came to power in 1974, in the cold war politics, Ethiopia sided with the USSR. Thus, government intervention in university affairs expanded, including security surveillance, repression of dissent, mandated courses on Marxism, prohibition of student organizations, appointment of senior university officers, and control of academic promotions. William Saint pointed out three notable outcomes of the cold war era in Ethiopian higher education; intellectual life atrophied on campuses, academic brain drain soared, and the country’s education system became largely isolated from the Western world (Saint, 2004). Though higher education enrollment did not show a significant development, from 446 in 1956/57 to 6,474 in 1973/74 (see table 2), the enrollment rate in both primary and secondary level has shown a significant growth from what it was in 1950s and 1960s. Primary enrollment grew from 135,467 in 1956/57 to 1,042,900 in 1974/75 and secondary school enrollment from 4,845 to 81,000 in the same years (see table 2). This may be attributed to the big literacy campaign started in 1973 in the military regime (Ibid).

In 1977 the revolutionary regime issued Proclamation No. 109, which created the Commission for Higher Education. This document also outlined the main objectives of higher education institutions as follows: To train individuals for high-level positions in accordance with the national plan of development and to provide qualified medium-level personnel to meet the immediate needs of the economy, to improve the quality of education, strengthen and expand tertiary-level institutions, and establish new research and training centers, and to contribute to a better standard of living among the masses by developing science, technology, the arts, and literature (Teshome, 2007a). The establishment of the Commission for Higher Education in 1977 was a landmark for the higher education sector in Ethiopia. However, the commission had not been supported with clear and forward looking policies and strategies to expand and reform the higher education sector in the country. The sector had only two universities and few colleges. Provision of private education was prohibited between 1974 and 1991 and therefore no private higher education institution was operating in the country. As a result, the higher education sector's development was limited, in terms of teaching and research, as well as community service (Damtew, 2005).

With the overthrow of the military regime in 1991, Ethiopia moved significantly from a socialist state controlled economy to a capitalist free market economy. However, as the twentieth century drew to a close, Ethiopia found itself with a higher education system that was regimented in its management, conservative in its intellectual orientation, limited in its autonomy, short of experienced academic staff, concerned about declining educational quality, deficient of adequate finance, weak in its research output and poorly connected with the intellectual currents of the international higher education community. Though the gross enrollment grew in all levels of education between 1990/91 and 2003/04 (see table 2), the participation rate in higher education was about 0.8% in 2000/01 (Teshome 2003). Thus, quest for higher education reform was a priority in the education sector of the new government (Ibid).

TABLE 2

Enrollment History in Brief in Ethiopian Education System

Academic year	Primary (grades 1–8)	Secondary (grades 9–12	Higher (post-secondary)
1956/7	135, 467	4,845	446
1974/5	1,042,900	81,000	6,474(1973/74)
1990/91	3,926,700	454,000	18,000
2002/03	8,743,265	627,000	147,954

Sources: UNESCO, 1961; World Bank, 2004; Negash, 1990, McNab, Teshome Wagaw, 1990:167

Next we will see the structure of the Ethiopian higher education system and its compositions.

3.3 The Structure of Ethiopian Higher Education

Ethiopia's educational system can be categorized generally in "*single public system: multiple sectors*" categorizations of Burton R. Clark in which "*higher education remains under the hegemony of one level of government but the system is substantially differentiated into two or more type of institutions*" (Clark, 1983:54). The pre-higher education system is generally characterized by 4-4-2-2/3 system. The primary education covers the first eight years of schooling. The secondary education after grade eight consists of two cycles having two different goals. The first cycle is a two year general secondary education (grades 9-10), basically preparing students for higher secondary education and technical and vocational education at higher levels. After completing the first cycle of general secondary education (grade ten), students will be streamlined into higher education preparatory grades 11 and 12 or Technical and Vocational Education and Training (TVET), based on their academic merits and preferences. Thus, the first cycle of secondary education is the source for producing trainable persons who would either join training for a mid-level labor force or university preparatory programs (Teshome, 2007a).

The current education system entails students who complete two-year preparatory classes in grades 11 and 12 and are eligible to join any program and institute of higher education. Those going for higher education studies are expected to sit for placement examination after two years of preparation to join their choice of fields of study in the universities (Teshome, 2007a). Furthermore, students who follow a three year technical and vocational education and training (TVET) are also eligible to enter higher education institutions and possibly continue for a degree level training, basically as advanced standing student. The actual implementation of such provision has not yet been clearly outlined and supported with working procedures and guidelines. So many stakeholders in the TVET sector including the students are not very clear and knowledgeable about the modalities and mechanisms of realizing these opportunities (Ibid).

In the system operational until 2002, students who complete grade 12 and who score 2.0 points and above in the Ethiopian School Leaving Certificate Examination (ESLCE) were the ones that were eligible to join higher education institutions and programs, and admitted within the place available in the respective universities (World Higher Education Database, 2007). The duration of study of post-secondary education and training differs on the basis of the programs and levels. Diploma level programs, which are basically part of the TVET, last from two to three years after the general secondary education. Students who are enrolling in universities in the degree programs vary their duration between three to five years. The undergraduate level programs have the duration of three years for most programs, while four years are required for engineering, law and pharmacy and five years for medicine and veterinary science (Ibid).

Higher education institutions in Ethiopia are generally grouped on the basis of the type of institution, qualification level and ownership. With respect to type, institutions are designated as University, University College and College or Institute. The status of a “University” is granted by government up on the fulfillment of certain criteria set in the Higher Education Proclamation (EPRDF 2003a). These criteria include number of regular students that have to be at least 2000, demonstration of capacity to graduate at least four consecutive degree batches, have at least three faculties or colleges, undertake research and demonstrate publications of result and so on (Ibid). The status of university college, college or institute could be conferred either at the time of establishment or after demonstrating that a given institution fulfills the requirements as set out in the proclamation. Institutes are also organized as those conferring diploma or/and degree as well as graduate levels (Master and doctorate) degrees and on the basis of ownership as federal, regional, private and non-governmental body (Ibid).

The federal institutions are either under the direct auspices of the Ministry of Education or under other governmental bodies, such as the Ministry of Defense. Most of the higher educational institutions under regional governments are diploma level teacher training colleges and post-secondary technical and vocational colleges (Teshome, 2007a). Almost all private colleges are established as for profit institutions, while the non-governmental ones are not for profit institutions (Ibid). Most private institutions in Ethiopia, like others in Africa, offer courses that render good employment opportunities. The programs include business administration, computer studies, and information technology (IT). Others also provide training in healthcare and teacher education. A few of these colleges also offer distance education to tens of thousands of students (Ibid).

Higher education institutions differ from vocational institutions in the duration of their programs, the awards they give and the higher body regulating them. Higher educations lasting between three to four years are given by universities, university colleges and specialized institutions. These institutions are administered and coordinated by the Ministry of Education. Higher vocational and technical education, lasting between two and three years, are offered by agricultural and teacher training colleges, engineering and technological institutes, health and commercial institutions. Regional governments and private providers regulate and run junior colleges and other colleges offering diploma programs (Teshome, 2007a).

In addition to the traditional educational system in the country, distance and lifelong higher educations are given in different higher educational institutions. Addis Ababa University offers distance learning in MBA and Addis Ababa Commercial College, Bahir Dar, Mekelle, Jimma, and Awasa Universities offer diploma level trainings. Continuing education is also given in almost all institutions in evening hours or summer times. This is because they are mostly given to adults and are on-job trainings that are paid for. There is a plan to expand these programs to a higher level in all the universities (World Higher Education Database, 2007).

The admission requirement for non-university higher education is the Ethiopian General Leaving Certificate Examination, as opposed to the university level studies which require the additional Ethiopian Higher Education Entrance Examination at the end of the preparatory classes of grade 11 and 12. The minimum requirement for enrollment into higher institutions is a C-level in four subjects (Teshome, 2007a). Female students and the disadvantaged are accepted at lower grades as part of the affirmative action scheme of the Ministry of Education. There is a uniform grading system across the institutions in the country. Higher institutions use letter grading of “A” to “F”, with “A” for the highest score and “F” the lowest. In undergraduate education, the pass or fail level is “C” where as in postgraduate, it is “B”. In most cases, marks are out of 100 where the lowest pass mark is set at 60. The tuition fee for nationals equals to a minimum of 1200 ETB and a maximum of 3000 ETB (World Higher Education Database, 2007).

The principal management structures of public university administration in Ethiopia include administrative Board, Senate, Academic Commissions, and Department Councils. All of them have considerable autonomy in decision making and policy making processes. The Board reviews and approves the plans and budgets of each institution to be submitted to the government, evaluates the implementation of educational programs, and submits suggestions to the Ministry of Education (Teshome, 2007a). The Senate prepares the institution's strategic plan, sets policy on academic matters, approves new courses, ratifies changes to the academic structure, awards academic promotions below professorship, and though it is not yet implemented, it has the power to determine the type and amount of service charges (other than tuition fees). Each university is managed by a president and two vice-presidents (academic and administrative). They are appointed by the Ministry of Education upon recommendation of the university's Board and serve a five-year term (EPRDF, 2003a). The new Higher Education Proclamation also decentralizes much of the administrative, budget, and other authorities to individual higher educational institutions in the interest of greater institutional autonomy, flexibility and responsiveness (Ibid)

The Ethiopian higher education system faces some major challenges. These include, low participation rate even by the Sub-Saharan standard as we have seen above, inadequate academic staff profile as it has been described in the World Bank Sector Study report, (the ratio was 1:8 in 1995 and now it is about 1:12 (World Bank, 2005)). Shortage of adequate finance as compared to the increasing number of students, the weakening of the proportion of senior academic staff with doctoral degrees within the system, low research undertakings and outputs, huge brain-drain, poor partnership and international networking also specifically affect the quality of education. In addition, poor and cumbersome management system, inadequate and poor facilities, infrastructure and finance are also in the way. In the face of these challenges, some reform measures have been undertaken. The next section deals more about these reforms that have been taking place since 1991.

3.4 Higher Education Reforms Since 1991

The first comprehensive higher education reform policy was adopted in 1994 with a view to enhancing the education sector as key to socio-economic development of the country. The policies stress issues of quality and relevance in educational programs, quality of teaching staff and facilities, improvement of the learning process towards a focus on students, improvement of management and leadership, introduction of financial diversification including income generation and cost-sharing by students, and improvement in the system of evaluation, monitoring, autonomy and accountability (Teshome, 2003). The relevance of these policies reaches their peek with the adoption of Higher Education Proclamation in 2003 to realize the above objectives (Ibid).

According to the 2003 Higher Education Proclamation, the Ethiopian higher education system is derived by the following objectives: 1) produce skilled manpower in quantity and quality that will serve the country in different professions; 2) expand higher education services that are free from any discrimination on grounds of race, religion, sex, politics and other similar grounds; 3) provide equitable distribution of higher education institutions; 4) lay down problem-solving educational and institutional system that enables to utilize potential resources of the country and undertake study and research; 5) provide higher education and social services that are compatible with the needs and development of the country; 6) lay down an institutional system that ensures the accountability of the institutions; 7) ensure the participation of all concerned bodies in administration and decision-making to create and promote participator culture; 8) make efforts to develop and disseminate the culture of respect, tolerance and living together among the people (EPRDF, 2003a). The reform measures that have been taken since 1994 are the general goal of the country to eradicate poverty and initiate a new beginning in the knowledge-driven economy in the long run. The higher education reform in this respect embraces a broad spectrum of the overall system, the institutions, and the academic programs (World Bank 2003).

At *system level*, the reform agenda tries to address the issue of enrollment and access. For a population of over 70 million, enrollment in Ethiopian higher education is still very low. The gross enrollment ratio in 2000 was only 0.8 % which places it among the lowest ranking countries of the world, as did its ratio of 62 higher education students per 100,000 inhabitants, in comparison with tertiary level gross enrollment ratio for Sub-Saharan Africa which was 4%, with a regional average of 339 students per 100,000 persons (Teshome, 2003). As a result, professional and technical capacities of all types have been extremely limited in Ethiopia, stunting previous development prospects (Saint, 2004). While enrollment (private and public) grew from 35,027 in 1995 to about 187,561 students in the 2004/5 academic year (table 3), only about 2.7 % of the age group currently participates in higher education in Ethiopia (Teshome, 2007a).

TABLE 3

Student Enrollment in Ethiopian Higher Education System

Year	**Total Enrollment**	**Annual Intake**
1995/96	35,027	6, 401
1996/97	42,112	9, 067
1997/98	45,554	7, 612
1998/99	50,305	9, 512
1999/00	67,673	7, 847
2000/01	87,431	8, 884
2001/02	101, 826	13, 361
2002/03	147, 954	18, 074
2003/04	172, 111	26, 556
2004/05	187, 561	31, 921
2005/06		36, 511

Source: cited by Teshome(2007a) from Ministry of Education, Education Statistics Annual Abstracts

However, intake with respect to regional distribution and social groups shows wide variations. In particular, intake of students from the Afar, Somali, Benishangul Gumuz and Gambela regions (rural and regions far from the capital) is relatively low (Abebayehu, 2003). Though there is very limited data available on this subject, studies conducted by Teshome (2003) and Saint (2004) suggest that the Ethiopian higher education system is characterized by inequitable access similar to that found in other African countries. The National Household Income, Consumption and Expenditure (HICE) Survey of 1999 indicates that 71 % of university students come from households with the highest 20% of incomes (Saint, 2004). Given significant differences in income and education attainment levels across regions in Ethiopia, access to higher education often favors students from upper-income homes, especially those from urban areas in the most prosperous regions (Ibid). The drop-out rate among higher education students has been between 10 and 15 % in recent years, with the largest losses occurring in the first year of study (Abebayehu 2003). This phenomenon is reportedly due to difficulties in adjusting to campus life away from home.

There were only nine public universities until 2006 in Ethiopia that are located in the major cities. Addis Ababa University, Mekelle University, Bahir Dar University Debub University, Alemaya University and Jimma University are the major ones. There are three institutions under different Federal Government entities, more than eight teacher-training colleges under Regional Governments and over 64 accredited private higher education institutions. These private institutions account for about 23% of the 2003/04 overall (degree and diploma levels) enrollment and about 11% of the degree level enrollments of the system (Teshome, 2003). Ethiopia is currently engaged in a highly ambitious effort to re-align its higher education system with more direct support of its national strategy for economic growth and poverty reduction. Accordingly, an aggressive expansion policy has been designed to raise the country's insignificant higher education enrollment ratio to more respectable levels. The share of higher education in the education budget is now 20% and the plan is to increase it to 25% (a very large proportion by international standards) by 2008 (Ministry of Education, 2007). In addition to the eight universities, 13 new universities have already been established with a cost of more about $1.4 billion, in different parts of the country. The new universities have the capacity to admit 121,000 students (Ibid).

Graduate education in Ethiopian higher education refers to master's level (usually two years), special training in the field of medicine takes three to four years and doctoral level usually takes four years. Graduate level training started in 1978 at Addis Ababa University, followed by Haramaya University. In 2005/06 academic year, graduate level training in Ethiopia is started to be given in eight public universities and in one private university college (Teshome, 2007a). When the graduate program first started in 1978, it was largely dependent on expatriate staff, mainly from the former German Democratic Republic and USSR. The graduate program was not supported by government funding at that time. Consequently, the program was largely sharing the budget and resources of the undergraduate program although some programs were getting financial and material support from external constituent. This situation continued until very recently and as late as the mid 1990's. At the graduate level, the enrollment increased from 788 in 1995 to over 3,600 in 2004/05, and reached over 6,000 in 2005/06 (Ibid).

3.4.1 Technical, Vocational Education and Training

Development of the Technical and Vocational Education and Training (TVET) sub-sector of education in Ethiopia is still in its infancy. It remained a neglected sub-sector of education until recently. International comparative data show that in 1994, the proportion of TVET to academic students at the second level of education in Ethiopia was nine times less than that of the Sub-Saharan Africa as a whole. When compared to Europe, this proportion was 36 times less for Ethiopia (World Bank, 2003). In 2001, there were 13 government and 10 non-government TVET Schools in the country enrolling a total of 4,561 students. Government run TVETs enrolled 2,631 students while 1,930 students were enrolled in non-government TVETs. In addition, there were 25 newly established skill development centers functioning in four regions; Oromia, Tigray, SNNPR and Amhara Regions. A total of 8,156 trainees were enrolled in these four centers (Teshome, 2007a).

Some 48,130 graduates of the two-year secondary education preparatory course for university admission took the higher education entrance examination in 2004 (Teshome, 2007a). Due to a steady rise in the number of qualifying students from secondary schools, the admission rate of degree applicants to higher education institutions has fallen from 45 % in 1997 to 26 % in 2001. Tertiary admission is clearly becoming more competitive, even in the face of rapid expansion (Saint, 2004). As a result of the restructuring and expansion efforts that are underway in TVET starting 2001/2002 however, considerable expansion and diversification of the TVET system have taken place. In 2001/2002, there were 126 government-run and 40 private institutions in operation designated to provide TVET programs (Ibid).

The Government provides virtually all of the financing used to run the public tertiary system. This includes the provision of free non-academic services to regular students; meals, lodging and healthcare (Teshome, 2007a). Full-time students (39% of all students) pay no tuition fees while they are studying, although part-time and private students do pay. Annual recurrent expenditures per university student are roughly Birr 7,457 (US$860) when government-provided food, lodging and healthcare are included and Birr 5,500 (US$636) when student welfare subsidies are excluded (Ibid). This later level of educational investment is low in comparison to Sub-Saharan Africa (US$1,500) and to neighboring nations like Kenya (US$1,800), Tanzania (US$3,236) and Uganda (US$800) (Ibid). Experience indicates that it is difficult to provide higher education at an acceptable standard for less than an annual per-student expenditure of US$1,000 (Association of African Universities and the World Bank 1997). In order to supplement the higher education finance, which is needed for expansion of the system, the government introduced student cost-sharing in September 2003 through a deferred payment taxation mechanism. We will discuss more in detail about the policy of cost-sharing in the next chapter. It has also created system-wide supervisory bodies with respective responsibilities for further policy development, quality assurance, and improved pedagogy. All of this has been ratified in a new Higher Education Proclamation approved by Parliament in June 2003.

At the *institutional* level, the proclamation awarded substantial autonomy to universities. Future recurrent funding will come in the form of block grants defined by a funding formula. According to Jongbloed, there are basically four types of resource allocation mechanisms [Negotiated, input based, out put based and student based funding] (Jongbloed, 2000:63). In negotiation scheme, budget is allocated based on the outcome of negotiation of the institution and the government, based on the previous years. In the case of input, on the other hand, it is fully based on the cost of higher education (the number of intake of the student, expense for teaching and learning processes) and in the case of output scheme, allocation is based on number of graduates. In student-based funding, the fund is directly given to the students and it is the students who are suppose to choose which institution they go to (Ibid). The Ethiopian budget allocation schemes from the above categorization belong to the negotiated funding. "*Under the current Ethiopian higher education finance system, recurrent budget has been allotted to each higher institution through the Ministry of Education. The amount of budget allocated has been determined by how much an institution received last year*." (Merisotis, 2003:3).

Moreover, according to the 2003 proclamation, university boards and staff will choose their own institutional leaders, and non-academic staffs have been de-linked from the civil service. Strategic planning, income diversification and Information and Communications Technology (ICT) developments are being encouraged to meet the fiscal, space and instructional requirements of the on-going expansion. Generally, autonomy of institutions, according to the 2003 proclamation, means any institution shall have autonomy in: (a) administration of personnel including employment, (b) financial administration, (c) determining internal organization, and (d) establishing relations with local and international counterparts.

At the level of *academic programs*, degree courses have been reduced from four to three years in length, with much of the former 'freshman' year subject matter being transferred to the secondary school level. New degree courses are being introduced in response to anticipated labor market needs that underpin the nation's economic development strategy, and in preparation of its citizens for democratic participation in civic and social affairs (World Bank, 2003). The disciplinary distribution of degree students has shifted somewhat over the past decade. Enrollment shares of business/commercial/social science disciplines have risen at the expense of agriculture, natural sciences and (to a lesser extent) engineering. Much of this shift reflects the recent aggressive entry of private colleges into the former areas (Saint, 2004).

But the Ethiopian labor market for university graduates will remain limited in an economy where 80 % of the labor force is engaged in agriculture and in which the civil service appears amply staffed (Saint, 2004). Unfortunately, no systematic study of graduate employment has been undertaken for some time, although newspaper opinions suggest that graduate unemployment may be rising along with increased university output. Only steady economic growth will provide the financing required both to expand the system and to improve opportunities for gainful employment for the rising numbers of graduates (Ibid). Despite all the efforts made to expand access to higher education in Ethiopia, it is premature to see higher education as a “right” or “obligation” since it still is in the hands of the few elites; instead higher education in Ethiopia is still a “privilege” in Trow’s categorizations (Trow 1970: 4).

3.5 Financing the Ethiopian Higher Education

Ethiopia spent on average about 2.8% (ranging from 2.5% in 1995/96 to 4.3% in 2002/03) of its GDP on education (table 4), lower than the average for Sub-Saharan Africa that is around 3.4% (Teshome, 2007a). The annual budget allocated to the education sector on average was about 14% ranging from 9.5% in 1999 to 21.8% in 2005 (table 4). It has shown an increase from about 12.5% to 18.8% between 1995 and 2002/03 and it became 21.8 in 2005 (Table 4). However, this is still low compared to the African average of 20% (Teshome, 2007a). In the last 12 years, of the total education budget, on average 15-20% was allocated to higher education, reaching about 23.1% in 2003/04 fiscal year (table 4). Though education sector budget allocation in general and higher education in particular have shown growth, the other computing sectors did not make much progress in government allocation. The share of the government budget to health sector for example has declined from 5.3% in 1995 to 5.1% in 2002/03 and 4.6% in 2005, in the same way, energy and mining declined from 4.4% to 2.8% and then 1.0% in respective years (table 4).

TABLE 4

Public Expenditures on Selected Public Sectors in Ethiopia (1995/96-2005)

year	1995/96	1996/97	1999/00	2000/01	2001/02	2002/03	2004	2005
Educ. Share of GDP%	2.5	2.5	2.5	2.8	3.4	4.3	-	-
Educ. Share of Government's budget	12.5	14.3	9.5	14.4	16.8	18.8	19.9	21.8
Higher Educ. Share of Educ. budget	15.0	15.8	14.9	18.0	18.0	23.1		
Health share of Gov. Budget	5.3	5.8	3.3	4.0	4.8	5.1	4.9	4.6
Agri. Share of Gov. Budget	12.7	13.4	8.3	9.4	12.4	15.6	21.0	21.3
Energy & Mining	4.4	8.0	1.8	0.4	2.8	2.5	0.5	1.0

Source: World Bank 2004[13]and International Food Policy Research Institute (IFPRI)[14]

These indicate how the government has been committed for the education sector even at the expense of other compelling demands. The share of higher education budget has also increased from 15.0% in 1995/96 to 23.1% in 2002/2003 (table 4). In real terms, the recurrent budget has increased from around 88 million Birr (10 million USD) in 1995/96 to over 665 million Birr (over 75 million USD) in 2005 (table 5). Although there is still budget shortage in universities in relation to the rapid increase in student population, the recurrent budget allocation has grown more than five times in the past twelve years. In addition, the capital budget investment for higher education in Ethiopia has increased from less than 70 million Birr in 1995/96 to over 700 million Birr in 2004 (table 5).

[13] "*Higher Education in Ethiopia: The Vision and its Challeges.*" <http://www.iked.org/ethiopia/web/PDF/Higher_Education__in_Ethiopia__The_Vision_and_its_Challenges%5B1%5D.pdf >accessed on February, 2008

[14] Discussion Paper 00702 May 2007The Bang for the *Birr*: Public Expenditures and Rural Welfare in Ethiopia.< http://www.ifpri.org/pubs/dp/ifpridp00702.pdf> accessed on April, 2008

TABLE 5

Recurrent Budget Allocation for Public Universities in Ethiopia (1995/96-2005/06)

Fiscal Year	**Recurrent Budget(Eth. Birr) 1 USD ~8.6 Birr**	**Proportion that goes to salary (%)**
1995/96	88, 363,082	59.4
1996/97	113,774,900	57.7
1997/98	144,434,400	54.1
1998/99	198,659,200	42.4
1999/00	235,158,300	39.5
2000/01	254,867,700	46.3
2001/02	328,480,300	31.6
2002/03	443,781,700	29.4
2003/04	510,434,300	31.6
2004/05	575,054,500	35.6
2005/06	665,100,000	-

Source: cited by Teshome (2007a) from Ministry of Education, Education Statistics Annual Abstracts

The government has indicated a continued commitment to invest and support further expansion and strengthen the existing institutional capacity in the coming decade. To this effect, the five year (2005-2009) education sector development program indicate that the higher education system in Ethiopia should be moving away from exclusive enrollment of 1-2% of the age coherent towards increasing participation to over 5% (Teshome, 2007a). It is anticipated that the budget allocation for higher education will be about 25% of the total educational budget, primary education accounting for 54.8% of the budget (MoE, 2005). For the planned period, a total budget of over 1.5 Billion USD (1.1 billion for recurrent and 477 million USD for capital) is expected to be earmarked for the higher education sector (Ibid). According to the third educational sector development program, the capital investment is envisaged to be about 313 million USD for civil works and 164 million USD for equipments and furniture. In addition, about 36.5% (i.e. 375, 3 million USD) of the recurrent budget would be allocated for salary and the remaining 63.4% (i.e. 651.5 million USD) for non-salary expenditures (Teshome, 2007a).

TABLE 6

Anticipated Expenditure Budget (in Birr) for the Education Sector in the Third Education Sector Development Program (2005/06-2009/10)

Expenditure	**2005/06**	**2006/07**	**2007/08**	**2008/09**	**2009/10**	**Total in Birr 1 USD ~8.6 Birr**
Civil works	793.3	474.6	711.0	458.1	254.6	2,685.6
Equipment & furniture	524.2	263.4	409.9	122.3	91.5	1,411.3
Salary	361.8	618.8	700.7	760.3	785.9	3,227.4
Non-salary	576.0	851.1	1,118.1	1,402.1	1,655.5	5,603.3
Total	2254.3	2207.9	2939.7	2742.8	2787.5	12,937.6

Source: cited by Teshome (2007a) from Ministry of Education, Education Statistics Annual Abstracts.

The goal by 2009 is, for the share of education from the total public budget to be 19-20% (MoE, 2005). The share of higher education from the total educational budget on the other hand is, anticipated to be between 22% and 26% by the end of the same year (Teshome, 2007a). This huge investment seems ambitious, taking the socio-economic development of the country and the other computing public needs like health and clean water, HIV/AIDS and malaria which demand more priority, into consideration. But it is an investment the country needs to expand access and be competent in the knowledge economy.

Higher education in Ethiopia has been a significant force in development through production of high level human resource and research. It, particularly before 1991, has been the institution of leadership in addressing societal concerns and development and democratization. In terms of societal and governmental expectations however, the higher education system cannot take justifiable pride in what it has achieved the last six decades of existence in Ethiopia. It has not expanded sufficiently to open opportunities for much of the youth and life-long learners and to satisfy the demand of the economy of the country. In 2003-04, for a population of over 70 million, the total enrollment in both public and private higher education institutions was less than 200,000 (Ministry of Education, 2005).

TABLE 7

Population Growth and University Enrollment in Ethiopia (1995-2004)

	1995/96	**2000/2001**	**2003/04**
Total Population in million	**57.9**	**67.8**	**70**
Total Enrollment	**35,027**	**87,431**	**172,111**
Number of public Universities	**9**	**9**	**9 this become 21 in 2007**
Enrollment ratio	**____**	**0.8**	**2.7**

Source: Thomas P. Ofcansky and LaVerle Berry, editors 1991 and Teshome 2003, MoE, 2005

As we can see in the table 7 , even thought student enrollment doubled in number within five years from 35,027 in 1995/96 to 87,431 in 2000/01 and even more,172,111 in 2003/04 (Ministry Of Education, 2005), there were only 9 public universities for a population of about 72 million until 2006. The gross enrollment ratio in 2000 was 0.8 % and 2.7 % in 2005/06 which places it among the lowest ranking countries of the world, as did its ratio of 62 higher education students per 100,000 inhabitants, in comparison with tertiary level gross enrollment ratio for Sub-Saharan Africa which was 4% with a regional average of 339 students per 100,000 persons (Teshome, 2003).

3.6 Concluding Remarks

So far we have seen the socio-economic condition of Ethiopia and its higher education developments since 1950s. We have also discussed about the structure of the entire system, the higher education reform agendas since 1991 and the development of Technical and Vocational Education Training (TVET) sector and the role it has in expanding access. Finally, we have seen how the Ethiopian higher education system is financed and the trends of recent investments to expand the sector. In the next chapter, we will focus more about the challenges of higher education finance in Ethiopian and the introduction of cost-sharing in order to supplement government budget and its implications.

Chapter Four: Challenges and Prospects of Cost-Sharing in Ethiopia

As we have seen in the second chapter, the high relevance of higher education for economic development and mobility, advancement of technology and democratic practices, analyzing social problems and finding solutions (Armbruster, 2006), bringing social justice, promoting greater social cohesion, trust in social institutions, and appreciation of diversity in gender, ethnicity, religion, and social class (Teixeira, et al, 2006), has been clearly recognized by most scientific researches. Although the first two or three decades, since 1950s, were fruitful in producing the elites, competent leaders, experts, professionals and researchers, in Ethiopian higher education, in its recent history it has not leading as it has kept pace with changes to introduce new approaches to effectively contribute to transforming the economy, livelihood of the society and the development of the country at large (World Bank, 2003). Saint (2004), in his study of Ethiopian higher education before 1994, said, Ethiopian higher education has become less cost effective and poor in terms of efficiency that it is largely characterized by high dropout or dismissal rates, particularly of girls, not fully autonomous with stuffiest public accountability. Generally, the challenges, or what Johnstone called “austerity”, that Ethiopian higher education has passed through since its existence is a combination of multitudes of factors.

This chapter explores the challenges that the Ethiopian higher education is facing in terms of financing the sector, the basic forces behind this financial austerity and its implications on access and equity. It also deals with the rationales for adopting cost-sharing as a remedy for these problems in Ethiopia. Then, it looks into its implementation and complexities. Finally, the chapter deals with the type of cost-sharing adopted in Ethiopia and its implication on access.

4.1 Austerity in Ethiopian Higher Education System

There are different causes of financial austerity in developing and developed countries but the extent of the problem varies based on their socio-economic and political background. As we have seen in the second chapter, Johnstone (2005) explains this mainly from the perspective of developing countries and Mora and Vila, (2003) and Teixeira et al, (2006) explained it from the developed countries' (OECD) perspective. Here, both perspectives will be used to analyze financial austerity in Ethiopian higher education.

1-The Demand Pressure: At an estimated population of 72 million, Ethiopia is getting closer to being second in Africa, next to Nigeria and also the most populous nation currently in Sub-Saharan Africa. And Ethiopia's population is growing at a rapid pace, adding some two million people or 2.1-2.5 % every year. The total population in 1960 was only 23.6 million, within 28 years; this number doubled and became 47.3 million in 1988, which in 2003 grew to 70 million. The birthrate in that same year was 39.81 and it became 37.39 in 2007 (CIA World Fact Book, 2007). According to the 2003 population study, approximately 3% of the population was over 65 years of age, with another 44% of the population under 15 years of age and the rest 53% of the population between16-64 (Ibid). This indicates that the majority of the population is young and demands education at all levels. The combination of high birthrates plus increasing percentages of these numbers completing secondary school and aspiring to have some form of higher educational experience have their own implications in creating massive demand pressures on tertiary education system in Ethiopia.

However, it is not only the demographic increase of the young generation but also the increasing in enrollments in primary and secondary education that is creating a demand pressure on higher education in Ethiopia, which indicates that more students are aspiring post secondary education. According to the World Bank (2006) statistics, the completion rate of primary education has dramatically grown since 2000 from 21.1%to 41.3% in 2005 and 48.6%in 2006. This staged increase is also extended into the secondary education enrollment growing from 13.3% to in 2000 to 27.4% in 2006.

TABLE 8

Completion and Enrollment Rate in Primary and Secondary Education in Ethiopia

year	2000	2005	2006
Primary school completion rate	**21.6**	**41.3**	**48.6**
Secondary school enrollment rate	**13.3**	**24.0**	**27.4**

Source: World Bank (2006)

Thus, the demand pressure presupposes the growth in secondary education participation.

The demand pressure is also a function of other factors like the change in employment opportunities with the high value of higher education degree in the labor market. For example, the 2001 survey of 192 employers in seven regions of Ethiopia (Budu 2002) found that they encountered the greatest difficulty recruiting new employees in the areas of business administration, engineering, computer science and law, because of few trained man power in these areas. In another instance, a separate ranking of disciplinary demand on the basis of the actual number of advertised vacancies indicated a high demand for university graduates (Ibid). This situation motivates potential students to look for some kind of higher education training.

Last but not least, though it is still on the rise in developing countries, the advancement of democratic values which directs an increasing regard for social and economic mobility and justice, resulting in policies designed to increase higher educational participation, the change in employment Though there are no extensive studies made on the enrollment pattern of ethnic groups in Ethiopian higher education, there are quite clear indicators on the participation rate of female students throughout the time. For example, the higher education enrollment pattern of female students has shown a considerable growth from 20.8% in 1995/96 to 25.2 in 2003/04 (MoE, 2005)

As we have seen in the third chapter, even though the number of students who join higher education has increased from 35,027 in 1995/96, to 187, 172,111 in 2003/04, the participation rate has been extremely low (2.7%) even by Sub-Saharan standard (5%) because of the limited capacity of the higher educational sector in Ethiopia. Despite the large investment and expansion efforts of the higher education sector, the staff–student ratio is low, commonly ranging between 9 and 16. For instance in 2002, the ratio was 9, 11, 12, 14, 13 and 16 for Jima, Debub, Alemaya, Mekelle, Addis Ababa and Bahir Dar universities, respectively (Teshome, 2004). Ratios in the universities of Ghana, Cairo and Makarere stand at 19, 28 and 20, respectively (World Bank, 2003). Moreover, the distribution of academics with high ranks like professor and associate professor has been only around 10% on average, while only 45% of the faculty has the academic rank of lecturer and 24% below the lecturer positions (MoE, 2005).

Generally speaking, though the demand pressure in Ethiopia is a function of different factors as explained above, the major factors are demographic increase in the traditional college-age cohort compounded by the increasing secondary school completion rates, which in turn increases the number of those wanting to go on to higher education, further more compounded by an expansion of what may be considered a college-going age cohort to include adults formerly bypassed by the system. The demand pressure has currently become even more challenging in the effort to change from elite to mass higher education participation and at the same time trying to become more economically competitive in an increasingly global economy. As a result of limited access and huge demand pressure, higher educational institutions in Ethiopia have been characterized by over crowdedness, low quality and exclusive in nature.

2-High Per-Student Cost: Covering the cost of higher education in Ethiopia had been the total responsibility of the government until 2003. Moreover, until 1991, higher education had been located exclusively in the public sector. Thus, students paid no tuition fees and were provided with accommodation, meals and certain other benefits free of charge until the adoption of cost-sharing in 2003. As the number of students in higher education increased, the government also kept allocating more money for the higher education sector. From the recurrent budget allocation of the universities, in general, consistently more than 30 % goes to salaries (see table 6) though it varies from year to year like 59.4% in 1995, 29.4% in 2003/04 and 35.6% in 2004/05 as we have seen in the third chapter, and over 15% to student food and room. During the last twelve years, out of the total capital investments made to higher education, not less than 45% was allocated or utilized for construction and procurement works related to dormitories and cafeterias. The provision of food and housing, on average, shares about 15% of all recurrent expenses (World Bank, 2003). This has constrained investment on academic related activities, such as books, library, laboratory, equipment and faculty.

Per-student or unit cost in higher education tends to be high throughout the world because of high input of relatively costly labor, costly equipment (like computers, scientific equipments, library materials) and the expenses of student living. "…*an important starting point in any consideration of financing higher education is to recognize that the natural trajectory of per-student instructional costs is to increase at rates equal to the increases in labor costs – only minimally, if at all, offset by advances in productivity – and thus, assuming some growth in the overall economy, almost always in excess of the prevailing rate of inflation*." (Teixeira, et al, 2006: 5)

The per-student cost in Ethiopian higher education differs from institutions to institutions and among different programs too. Annual recurrent expenditure per-university student on average was roughly Birr 7,457 (US$860) when government-provided food, lodging and healthcare included and Birr 5,500 (US$636) when student welfare subsidies are excluded in 2002. The later level of educational investment is low in comparison to Sub-Saharan Africa (US$1,500) and to neighboring nations like Kenya (US$1,800), Tanzania (US$3,236) and Uganda (US$800) (Teshome, 2007b). Experience indicates that it is extremely difficult to provide higher education at an acceptable standard for less than an annual per-student expenditure of US$1,000 (Association of African Universities and the World Bank 1997). According to the World Bank's estimation, per-student cost in Ethiopian public universities has grown since 2003 and has become between 800 to 1500 USD per annum, with the highest cost for natural science fields and universities with an increased cost for universities of more reputation and better facilities cost more. Most likely, this cost will be increasing in the consecutive years (Teshome, 2003) because of a number of factors like regular increasing in the rate of inflation, increasing instruction cost, rising administrative cost because of expansion of the system both in number and capacity, and the rising cost of maintenance.

TABLE 9

Per-Student Cost in Ethiopian Universities

University	**Total Revenue(in Eth Birr)** **1 USD = 8.6 Birr**	**Expense per student(Eth Birr)** **1 USD = 8.6 Birr**
Addis Ababa	117,913,000	12,022
Alemaya	23,560,500	6,803
Bahir Dar	29,273,500	6,764
Debub	30,261,250	7,341
Jimma	35,221,750	8,706
Mekelle	29,601,250	8,560

Source: cited by the World Bank from Education Statistics Annual Abstracts

The World Bank (2003) recommends that higher education expansion is rather steadier than the government envisages: limited to 6% to keep it balanced with secondary education, with enrollment expanding more slowly in early years, but continuing for a longer period. It warns that otherwise the 24% maximum share of education expenditure to higher education may be grossly violated in Ethiopia. It notes that the extent that this is affordable depends on whether GDP grows at 3% or 6%. The effect of these high and naturally rising per-student costs are greatly magnified by pressures to expand enrollment. The demand for higher education is rising rapidly especially in a situation where rapidly growing populations and low level of participation is eminent. The natural trajectory of higher education cost borne by the government, or taxpayer would also take increasing portion of the gross domestic product and the public budget. Thus, under these conditions, the question is whether it is possible, for Ethiopia, a country with less than 40 % primary school enrollment, and many other socio-economic problems, to keep up with its free higher education policy. Taking many government priorities aside, the system of higher education itself is suffering from several problems for which resources are required.

3-The Decline in Available Public Revenue: Johnstone (2005) argued that the revenue allocated to higher education has been declining specially in developing countries because of increasing difficulty in taxation, lack of strong tax collecting capacity from the government's side or because of the fact that individual incomes, business profits, and sales, on which so much taxation depends, are too easy to hide or similarly, too difficult to verify or competition from other oftentimes more politically compelling, public needs (Johnstone, 2005). In the case of Ethiopia, however, the gross budget allocated for higher education from the government side has been increasing since 1995/96. As we have seen in chapter three, in 1995/1996 the recurrent budget allocated to higher education was 88,363,082 Eth. Birr. This figure then increased to 254,867,700 in 2000/01, 443,781,700 in 2002/03, 575,054,500 in 2004/05 and it became 665,100,000 in 2005/06(table 5). From the total spending of, on average, 2.8% of the GDP on education (table 4); the share that goes to higher education has also increased. For example, between 1995/96 and 2000/01, it has shown an increase from about 15% to 18% and between 2000/01 and 2003, from 18% to 21% (table 4). This scenario explains that, unlike Johnstone's explanation, the revenue allocated to public universities has not shown a decline through time in the case of Ethiopia.

However, though higher education has been enjoying increasing share in GDP year to year because of the government's commitment to expand access from exclusive enrollment of 1-2% to 5% by 2010 (MoE, 2005), with limited participation rate, the unit of funding per-student did not keep up with inflation as the number of students joining higher education increases. Thus, the costs of higher education, with rising of inflation rate as we can see on Table(10), and magnified by increasing enrollments, are calling for extremely high annual increases in government revenue. The inflation rate has shown a dramatic increase in Ethiopia since 2003. It was 4.00% in 2003 with the exception of significant decrease shown in 2005 (2.40%), it has been increasing alarmingly throughout the years reaching 13% in 2007 and recently 20%.

TABLE 10

Inflation Rate in Ethiopia (2003-2008)

Year	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Inflation Rate	4.00%	17.80%	2.40%	11.60%	13.00%	20%

Source: Index Mundi, Ethiopia Inflation Rate

However, the increased difficulty of taxation because of low income levels and weak taxation capacity(which this chapter going to explain more next)plus increasing competition from other formidable priorities like elementary and secondary education, public health, HIV/AIDS and Malaria, make increased tax revenues to higher education doubtful. Ethiopia is one of the poorest countries in the world with a lot of social and economic problems that demand the urgency of government's budget. Over 60 million (81%) people live on less than $2 a day (Human Development Report 2006) and approximately 8.6 million men, women and children are relying on food aid (EC Diagnostic Survey 2006) 1.4% of those aged 15-49 years are living with HIV/AIDS. And only 47% of the population has access to safe and clean water (Ethiopia Demographic and Health Survey 2005). Under such circumstances keeping pace in allocating more money each year for higher education (which believe to have more private benefits than public benefits) from government treasury, is more unlikely in the future.

Generally, the combination of high birthrates with rising participation rates and potentially explosive enrollment pressures on the one hand and the rising, diverging trajectories of underlying costs of higher education and with limited available governmental revenues on the other hand plus the greatest difficulty in raising taxes with the most voracious and compelling competitors, like public health, HIV/AIDS, elementary and secondary education, clean water and public infrastructure needs for the limited public money available, immersed higher educational institutions in a situation of austerity in Ethiopia.

In the face of the above austerity and other pending problems facing the higher education system of Ethiopia, the quest for reform became apparent for the government and policy makers. In 1994, comprehensive Education and Training Policy (TGE) was adopted in Ethiopia, with a view to enhancing the education sector as key to socio-economic development of the country. The policy stresses issues of quality and relevance in educational programs; quality of teaching staff and facilities; improvement of the learning process towards a focus on students; improvement of management and leadership; introduction of financial diversification, including income generation and cost-sharing; and improvement in the system of evaluation, monitoring, autonomy and accountability (Teshome, 2007b). This paper is not going to discuses all elements that are stipulated in the 1994 higher education policy reform document, rather the focus is on cost-sharing reform. Accordingly, the next part of this chapter will discus the rationales stated for adopting cost-sharing in Ethiopia, how it is implemented and the possible challenges and prospects it may face in the future.

4.2 Rationales for Cost-Sharing in Ethiopia

As we have seen in the second chapter, and is the case in many other countries, the Ethiopian cost-sharing policy also stipulated major reasons for the introduction of cost-sharing in Ethiopia. These rationales are the general objectives in which the policy intended to meet after the policy has been introduced. These rationales are illustrated below then we will see the possible challenges the policy may face achieving those objectives within the current scheme. The main objectives of cost-sharing policy in Ethiopia include the following:

1-Supplement Revenue as an Alternative Non-Governmental Source: Because of the austerity that the Ethiopian higher education system faced, as explained above, it became apparent that the increasing governmental revenue for higher education could not cop up with the rising demand from the students' side. Despite the regular increasing of government budget for higher education, there is a need for non-governmental revenue to cop up with the increasing demand. Thus the government can no longer exclusively and sustainably continue to invest in higher education as it does today. Moreover, other compelling and competing needs, which demand the immediate attention of government's revenue, lead to the point where it is no more possible to depend entirely on government budget as a long run objective for higher education finance for Ethiopia. Thus, according to the policy, government revenue needs to be supplemented through cost-sharing and other revenue/income generating activities.

2-Maintaining and Enhancing Access to Higher Education: The logic is, if there is other than non-governmental source of revenue to supplement higher education finance, it will be possible to invest more in order to expand access for more potential students. Without cost-sharing however, there will not be additional revenue for higher education to meet the ever increasing demand for higher education. Thus, the regular increasing number of students who are eligible for higher education every year on the one hand and the limited government funding to expand access on the other hand necessitated a new way of approaching higher education finance in Ethiopia. The fact that has been explained by Barr (2003), Johnstone (2005) Chapman (1999) in the first chapter, those who benefited have to share the cost, the added revenue from cost-sharing then, can expand capacity and access, both for classroom instruction and for living accommodations and thereby increasing participation, also holds true in Ethiopian context.

3-Addressing Equity In Terms of Opportunity in Higher Education: As explained in the third chapter, the Ethiopian higher education system is characterized by "elite" participation. Students getting places in universities are only a small proportion of the potential student population and are insignificant compared with the general taxpayers' population who require the same services from government. As stated repeatedly, the participation rate has been below 3%, even lower than the Sub-Saharan standard which is 5%. Even though the general public is taxed to finance higher education, it is only a small proportion of the population that benefits from it in Ethiopia. This means, the minorities who receive higher education for free are being subsidized by those who do not attend higher education and by the society at larger.

The National Household Income Consumption and Expenditure survey of 1999 indicates that not less than 71% of tertiary students in Ethiopia come from households in the top income quintile (Teshome, 2007b). This group represents students from high-income families. Especially In metropolitan centers such as Addis Ababa and Nazret, it has been observed that such students are often enrolled in the most prestigious and costly private and religious schools to help them prepare for the Ethiopian Secondary School Leaving Certificate Examination. Tuition rates in some of these private schools may reach as high as $US20, 000 (Abebayehu and Johnstone, 2001), suggesting the wealth of parents in the Ethiopian context in which the GNP per capita stands at US$100.00 (World Bank, 2003). Expensive as it is, attendance in these private schools is always a passport, guarantying students an almost 100 % passing chance on the Ethiopian School Leaving Certificate Examination. Thus, it is not appropriate that some of the most socioeconomically advantaged members of Ethiopian society are provided with higher education for free while many others in receipt of little assistance face extreme poverty and deprivation though they are paying taxes. It is the question of equity *"The average taxpayer funds a service from which only a fraction of the population directly benefits"* (CHEPS, 2001:54). Thus, according to the policy, it is appropriate and equitable that those who receive higher education pay at least a part for the additional individual benefits they receive.

4-Making Students 'Customer-like': According to Ministers Regulation No.91/2003 (EPRDF, 2003b), cost-sharing will make students responsible consumer of the service they are paying for. Students contribute to and ask for better efficiency in the management of institutions, and in the quality of teaching/learning and services. Students will also become more responsible for their education. In terms of value for money, students will increase their desire for transparency and accountability of faculty and the institutions. This idea is along with the principle of cost-sharing stated in the second chapter which is some kinds of tuition make students and families more rational consumers and the universities more cost conscious providers (Johnstone, 2006). Cost-sharing through tuition and other related costs would make universities more responsive to the individual, societal, and labor market demands (Teixeira, et al, 2006). The policy of cost-sharing in Ethiopia then has adopted this principle in the policy document, the idea is, institutions will be required to put in place management systems that allocate and utilize existing resources efficiently and effectively. Furthermore, they need to develop and nurture initiatives to diversify revenue and become student-centered in all their undertakings. By sharing costs, therefore, students will proactively and increasingly become the centers of higher education activities and strategies. They directly or indirectly influence the betterment of quality and relevance of education and training in the higher education system of the country. The issue of how meaningful and viable this is in the Ethiopian context is explained below in section 4.4.1 of this chapter.

The question is, how the policy of cost-sharing is implemented in Ethiopia, what kind of scheme is adopted, what are the possible practical challenges for putting these objectives or rationales into effect in Ethiopian context. These are the issues that the next part of this chapter going to address.

4.3 The Policy of Cost-Sharing in Ethiopia

4.3.1 The Origin of the Policy

The idea of cost-sharing in Ethiopia came up for the first time in the 1994 Education and Training Policy (ETP) adopted by the Ethiopian government as part of the overall higher education reform plan. But the kind of cost-sharing and its time for implementation was not specifically explained in this document. The financial austerity explained above, and the need for expanding the system to increase access from 0.8% participation rate of that time to a higher level at least by the Sub-Saharan African countries' standard (which was 4%) initiated the idea of diversifying higher education finance (ETP, 1994). The Education and Training Policy of 1994 simply put a general objective for future plan of action which stated that the priority for the government's financial support will be up to the completion of general secondary education and related training (grade 10) with increased cost-sharing at the higher levels of education and training (Ibid). This policy document was then further developed and an extensive study was conducted on Ethiopian higher education by the World Bank starting from 1999. Chapman (1999) was also engaged as a consultant to the World Bank on the issue of higher education financing in Ethiopia in April/May 1999.

At the beginning of the new millennium, the World Bank expanded its operational mission to include documentation and diffusion of "things that work" in the various spheres of national development and has come to see itself as a “knowledge bank” as well as a development investment bank (World Bank, 2003). Higher education finance was part of the extensive reform mission for the Bank (Ibid). The World Bank then proposed different alternatives of loan schemes for Ethiopia in 1999/2000, including a mortgage loan type mechanism involving the Development Bank as a lender (Teshome, 2007b). Though it was proposed in 1999/2000, cost-sharing was not implemented until 2003. Due to the Ethio-Eritrea war which started in 1998 the introduction of cost-sharing at such a difficult and sensitive time was hard from the point of view of political and practical considerations (Ibid). But public debates and dialogues with students were undertaken in those times prior to the implementation of the cost-sharing scheme in 2003. The major discussion issues were what are the rationales for cost-sharing for Ethiopia? What kind of cost-sharing is going to be implemented? What are its effects on access? Then, the Ministry of Education looked into the proposed loan systems and chose income contingent or what the policy document calls ‘’graduate tax scheme’’ as cost-sharing scheme and implemented it since 2003.

4.3.2 The Policy and Its Implementation

In order to create an appropriate legal framework for the 1994 higher education reform agenda, the Ethiopian government introduced a comprehensive higher education legal document for the first time in Ethiopian history. This document is called the Higher Education Proclamation No.351/2003 (EPRDF: 2003a). This proclamation lays down a fundamental reform in Ethiopian higher education system, which includes system of quality assurance, academic freedom, institutional autonomy, and revenue diversification including cost-sharing. The supplementation of higher educational revenues by non-governmental sources primarily by students and families is one of the major recommendations from the World Bank and most other development experts as one important solution to increasingly underfunded and overcrowded universities in developing counties (Johnstone, 2003).

Accordingly, the policy of cost-sharing stipulated in the Higher Education Proclamation, has been explained in detail in other regulatory legal documents adopted by the Council of Ministers. This regulation is named as Ministers Regulation No.91/2003 (EPRDF, 2003b). According to the Council, cost-sharing means *"a scheme by which all beneficiaries of public higher education institutions and the government share the cost incurred for the purposes of education and other services*" (Ibid). The policy has made the government cover the full cost of education only at primary level and up to grade 10, and the beneficiary has to share the cost at the secondary and higher education training levels (Teshome, 2007b). According to the provisions of these legislations, the beneficiaries of higher education, who have been obliged to share the costs of higher education pay their share from their income, payable from salary or other earnings obtained after graduation, in graduate tax form. As we have disused in the second chapter, income contingent loan and graduate tax are different. Income contingent loan makes the borrower to repay some percentage of future earnings until the loan is repaid at the contractual rate of interest, subsidized or unsubsidized, or until the borrower has repaid for a maximum number of years (Johnstone, 2006). Graduate tax on the other hand is an income surtax imposed on graduates, most of the time for the rest of his/her earning life time, as a contribution for the service he/she received without keeping individual borrowers accounts or balances owed (Woodhall,1989). In this case, the repayment is not related to the exact cost or loan (for more discussion, see section 2.5.3). However, in the case of Ethiopia, the regulation defines graduate tax as "*a scheme by which an amount is deducted from income in the form of a tax to be paid by a beneficiary who has been obliged to share the costs of his/her higher education*" (EPRDF, 2003b). Though it looks like an income contingent according to the definition, the proclamation calls it graduate tax. Neither the Higher Educational Proclamation No.351/2003 (EPRDF: 2003a) nor the Council of Ministers Regulation No.91/2003 (EPRDF, 2003b), give a reason for why it is called graduate tax. However, Johnstone (2003) argued that since both repayments are payments levied on top of income tax, people refer to them as the same[15].

[15] It should be noted that there has never been, though the year 2003, a true operational *graduate tax* according to the definition just given; most references to graduate taxes actually refer to income contingent loans that do, in fact, maintain "balances owed." (Johnstone, 2003)

The Ethiopian cost-sharing system defines the “beneficiary” as any student at a public institution pursuing higher education/training and who has entered into an obligation for the future payment of the cost of his/her education/training and other services (EPRDF, 2003b). The policy has been implemented in higher education institutions only since October 2003, following the promulgation of the Higher Education Proclamation and the Cost-sharing Regulations. As stated on article 4 and 6 of Higher Education Cost-sharing Regulation, all beneficiaries of public institutions of higher education, who enter an agreement, are required to share full costs related to food and lodging plus a minimum of 15% of the tuition cost (Ibid). The amount to be shared shall be revealed to the beneficiaries at the beginning of each academic year based on the cost incurred in each institution and depends on the program of study– medicine being the most expensive and humanities and social sciences being in the lower ranges. Accordingly, the full cost of food and room is estimated to be about 220 USD per-student per annum, while the 15 % cost of tuition that is to be shared by a student is in the range of 100 to 230 USD per annum per student. The total amount payable is subject to a service fee or interest charge, determined in relation to the bank rate in use at the time of the conclusion of the agreement (Teshome, 2007b).

The beneficiary shall start paying the amount within six months of earning income after graduation, or within a maximum of one year after graduation (after a 1-year grace Period), in the form of “graduate tax” of at least 10% of the monthly income of an employee, or amount owed deducted from the yearly income if self-employed (EPRDF, 2003b). The beneficiary can decide to deduct more than 10% of his/her income but it should not be more than one-third of his/her monthly salary or income (Ibid). According to the policy, completion of repayment of amount owed by beneficiaries, depending on the type and duration of program, not exceeding 15 years and the repayment period is calculated on the basis of the minimum monthly salary that graduates of different disciplines would get upon employment (Ibid).

Beneficiaries can pay the calculated amount upfront. In such a case, there is an incentive mechanism in which 25% of the amount to be repaid will be deducted or exempted (EPRDF, 2003b). Moreover, students enrolled in programs that are chosen by government for exemption are free from repayment. Such a program at the moment is teacher education where students trained as primary, secondary and high school teachers are not required to pay their share. Rather they will be required to serve as teachers in public schools for a specific number of years as allocated by the government (Teshome, 2007b).

4.3.3 Why Adopting an Income Contingent System in Ethiopia?

As we have seen in the second chapter, sharing of higher educational costs among different parties can be implemented in different forms like, upfront tuition fees (or other fees), grants (especially means-tested) and student loans(of whatever form). In the case of Ethiopia, there are no upfront tuition fees or other fees, and no means tested grant. But as of 2003, income contingent loan has been adopted, a loan which is given by the government not directly to the students in the form of cash, but to the institutions to cover part of the students' educational, food and accommodation expenses to be returned by the students in the form of income tax deducted from their salaries only after graduation and upon employment (Teshome, 2003).

If we take charging tuition upfront for Ethiopia as an alternative, for example, that means students who need to join higher education have to have money to pay upfront when they join higher education. This may not be a problem for those who can afford to pay the upfront fee. But the first economic problem associated with charging upfront fees for higher education is, for those who cannot afford to pay, there is only an ineffective capital market available for borrowing, the bank. In order to borrow money from back, there is a need for collateral or a guarantor in case the student fails to pay, which is difficult to provide for students from poor family backgrounds. The basic concern for a bank lending for human capital investments is that, unlike many other investments, there is no saleable collateral in the event of default, such as would be the case for the housing capital market. Moreover, the collection costs in the event of default in this case appear to be real in the absence of collateral.

In such cases, the other alternative mechanism to bring those who cannot afford is to provide a guarantor or collateral into the system i.e. governments to address the above problems by acting, in the limit, as a guarantor for student loans, and by paying the interest for the period before graduation. However, because of the expense involved, loans are usually made available only to students with poor parents or those who can establish independence through satisfying a complex set of conditions. This is called a means-tested loan system which may be effectively implemented in a situation where there are possible ways of identifying and verifying family incomes to subsidize the needy. According to the study made by Abebayehu and Johnstone (2001) however, means-tested loan system is very difficult to implement in Ethiopia and other developing countries with related conditions, for the reason that it is technically difficult to ascertain and verify incomes and assets since many families use banks seldom or not at all. Banks may also have little or no ability or inclination to link either deposits/withdrawals or interests paid in accounts to individuals and to share this information with authorities, in addition to the fact that the market value of real property may not be clearly known. Thus, both upfront fee and means tested grant or loan system have a potential problem on students from poor socio-economic backgrounds in Ethiopia.

All these points could be good reasons or justifications for adopting “graduate tax” or income contingent loan system instead of mortgage or means-tested system in Ethiopia. It is the high cost of participating in higher education (both through direct living costs and foregone income), combined with a lack of family and capital market sources of finance, that create a significant barrier in access for many students. Income contingent repayment arrangements avoid these problems, as we have seen in the second chapter, because the nexus between current economic circumstances and access to the system does not exist with these approaches because income contingent repayment makes family economic status less relevant for the prospective student since the student is going to pay the loan only after graduation.

Though income contingent loan scheme is relatively suitable for Ethiopia for the above reasons, it has its own limitations and challenges when it comes to implementation processes. The next part will deal with the challenges that the implementation of income contingent loan is facing in Ethiopia.

4.4 Complexities of Cost-Sharing in Ethiopia

Any institution or organization, public or private, government or non-government, university or civil service agency, in a given country is expected to function within a set of policies and regulatory frameworks. Policies and strategies show the vision, anticipation, aspiration and commitment of a government and the people. Within the context of the provided policies, there are opportunities and challenges. Cost-sharing as a policy in Ethiopian higher education institutions has been adopted since 2003 to achieve a set of objectives or rationales explained above. Here we will going to see some of the basic challenges the policy is facing achieving the very objectives of cost-sharing in general and technical difficulties with respect to income contingent loan scheme in particular. First we will see the general challenges and then the technical ones.

4.4.1General Challenges of Cost-Sharing in Ethiopia

1-Dependence on Donors and Foreign Aid

According to the higher education expansion plan, it is intended to increase the higher education participation rate exclusively from 1-2% current enrollment to more than 5% by the end of 2010 and to raise the budget allocation for higher education to 25 % of the total education budget, a trend which is supposed to continue every five years. The government has set objectives to raise the number of technical and vocational education and training (TVET) students in regular public institutions from 36,500 in 2001–02, to 200,000 by 2015; with a continuation of recurrent spending per-student unchanged at the current level of 2.8 times the per capita GDP; and an increase in the number of university students in regular government institutions from 28,000 in 2001–02 to 120,000 by 2015; with a continuation of recurrent spending per-student at the current level of 10.8 times the per capita GDP(World Bank, 2003).

However, taking the fact that most of the money for the initial investments to finance these objectives is intended to come from donors and development institutions, it makes its success more dependent on the goodwill of these institutions. According to the World Bank study, taking into account the requirements for primary education, the shortfall in financing for post basic education may reach as high as US$338 million annually in 2015. This is because the government does not have enough capacity to generate all the money to finance this huge expansion strategy. “*The gap is very large and probably impossible to bridge because donors have not made the same commitment to help defray recurrent costs as they did to finance the recurrent costs to universalize primary education under the United Nations Declaration on the Millennium Development Goals.” (World Bank, 2003: 110).* While the government may rise its domestic spending on education to narrow the gap, erasing it completely might also require combining policies to slow the expansion of enrollments, reduce spending per-student in government institutions through efficiency measures, or increase cost-sharing with students. Thus excessive dependence on foreign aid and donors for the initial capital investment make the policy dependent on the promises of donors and international financial institutions like the World Bank. Therefore, it is a challenge for the policy to be financially independent.

2- Lack of Awareness about the Policy

Knowledge about the policy of cost-sharing by the respective stakeholders (students, university management and the general public), is also important for the success of the implementation process. According to the survey made by Teshome (2007a) in five universities in Ethiopia (Hawasa, Jimma, Gonder, Bahirdar and Adama) only 32% of the management respondents came to know about cost-sharing from reading the higher education proclamation and relevant council of Ministers’ regulations, 41% from the university administrators while 27% from the media, including TV, radio and newspapers. Though the university community is supposed to know more about the policy because of their proximity and stake to the policy, as the survey shows, the awareness level is much less than expected.

The generally poor knowledge about cost-sharing is also demonstrated by the poor knowledge about income contingent where according to the survey about 16% of the management staff did not know anything about it. In many cases, both the faculty and the management are not clear about the principles, challenges and opportunities of the policy and many other critical provisions of the 2003 proclamation. Thus, without having basic knowledge and awareness about the policy, which actually directly affects universities and students, there will be a great tendency or probability of missing opportunities, misjudging orientations and misunderstanding missions and responsibilities. Therefore, lack of awareness about the policy is one of the challenges.

3- Income Contingent Does Not Provide Immediate Non-Governmental Revenue

The introduction of cost-sharing since 2003 has the objective of generating non-governmental revenue to supplement government's expenses for the expansion of the system. However, this ideal target for expansion is faced with a couple of challenges. To begin with, the income-contingent charge mechanism does not deliver significant immediate revenue that can be used for the near future expansion of the sector. This is because the current income contingent loan scheme excludes any kind of upfront fees in all forms from the system. All graduates are intended to start paying after graduation. As it takes a minimum of four years for enrollees to graduate and the recovery of the total cost takes 10 to 15 years of collecting only paying 10% of their monthly income through the proposed cost-sharing recovery scheme (provided graduates find a job immediately) , in which case the impact will not be felt immediately.

Higher education sector in Ethiopia is with a lot of problems, and as explained in the austerity part, needs an immediate financial remedy. In order to do this, the recovery rate has to be as immediate as possible. However, income contingent by its nature will not provide additional revenue in short period of time. As discussed earlier, the amount shared by students in Ethiopia is relatively very low; it is in the range of 320 to 450 USD per-students per annum. Taking the fact that graduates of higher education are in the relatively top segments of society in terms of their annual income which is commonly not less than 900 USD, the amount shared by the students is not enough to meet the intended objectives of generating non-governmental revenue to expand access. If the amount they pay every year is very small, it will prolong the repayment period which is a challenge for the higher education system that needs the recovery as soon as possible. This challenge is not specifically attributed as a problem only in Ethiopia, but taking the extent of the financial problem that the higher education in Ethiopia is facing, and the need for alternative non-governmental funding into consideration, it apparently seems challenging for Ethiopia.

4 -Difficulty to Implement the Concept of Making Student "Customer like"

As we have seen above, one of the objectives of cost-sharing in Ethiopia is to make students "customer like" which is related to the concept pointed out by Teixeira, et al (2006), that is, cost-sharing makes student rational consumers and institutions cost conscious providers that are more responsive to the individual, societal, and labor market demands. From this we can understand that students should have a choice of where and what they are going to study and institutions also should have relative freedom to recruit their own candidates. From the students' perspective, several factors influence the choice of institutions and programs. These include, institutional characteristics, such as location, space available and programs offered, and academic factors, including a students' level of academic preparation as well as the admission criteria of the institutions. Ironically, currently in Ethiopia, students are randomly placed to institutions in different parts of the country. And higher educational institutions also do not recruit their own students. The ideal situation would have been for each university to admit students with its own set of admission mechanisms or criteria. Instead, the current practice is that universities have centrally administered entrance exam which to date is prepared by a separate body called the Institute of Educational Research (IER) of Addis Ababa University where each university pays for the preparation every year and administer the test by the National Organization of Examinations (Teshome, 2007a).

Even though, the placement program looks into merit in general and specific subjects in trying to tie choices of students to a given program and institution, many students have narrow choices and less chance of getting the programs and institutions they are looking for. There is a centrally coordinated placement mechanism whereby the placement is actually done by representatives from all public universities in the premises of the Ministry. The Ministry has a big role in terms of determining the total number of students to be placed in each public university and placement of each student in different institutions and programs. Thus, without providing the right to choose where and what to study for students, and without letting higher educational institutions recruit their own students, it is hardly possible to make students "customer like" and introduce a market value in the institutions. This is because in a market situation, both providers and consumers should have free choice based on available information to make rational decisions.

Not only general challenges as explained above, the policy has also specific technical challenges related to the implementation of income contingent loan in Ethiopia.

4.4.2 Administrative Challenges

1- Excessive Government Subsidy

As mentioned above this repaying scheme also leaves out a significant number of graduates every year; graduates who are going to be primary, secondary and high school teachers are exempted from the income contingent of paying their share in Ethiopian case. According to World Bank's estimation, they constitute 35% of the total graduates every year (World Bank, 2003). Letting more than one third of the total graduate from direct involvement of financial contribution limits the amount of revenue government could generate and the expansion of the system with which it might be possible. Thus, taking a tax of 10% of income for up to 15 years (as indicated in the Higher Education Cost-Sharing Council of Ministers Regulation) with some 35% of graduates exempt for various reasons, would reduce the budget share of higher education in total public education spending, according to the World Bank. Moreover, Teshome (2007b) estimated that there would be about 30 % default rate. This fact coupled with unspecified interest rate, discounted present value, subsidies and administrative costs make the recovery less promising and the amount to be recovered may not be more than 5 %or so(Ibid).

Regardless of the adoption of cost-sharing scheme in 2003, the government is still covering the initial investment needed for providing food, accommodation and basic medical services to students in higher educational institutions every year. Students thus, when they join higher education they are provided all these services in the university campus free of upfront charges. As we have seen in the third chapter, this takes 15% of the each annual budget share provided to the university which is supposed to be used to expand the higher education coverage in the country. This means, the current practice of providing free meals and other services to students at the time of study is costing a significant portion of the money which could otherwise be used to facilitate the learning process and for buying equipments that help modernize the entire system. The government's justification behind such practice is to provide the service for those students that come from remotest areas of the universities. These students coming from far away would not have the privilege of coming to the universities and going back home everyday, and for this reason, they would have to rent a house and pay their food expenses which may discourage the participation of students from the rural part of the country. Needless to say, this situation makes the government's justification logical.

However, this system does also include students who live near the universities and students whose parents or guardians can afford to pay for these services without any assistance from the government. These students live in 1-20 kilometer radius in the city where the university is located. Thus, paying for their food and accommodation while their parents are living nearby seems ironical to the objective set by the policy. Apart from that, the 13 new public universities recently inaugurated in the country are scattered in all parts of the country and most of them are very close to the nearby villages of the ruler part of Ethiopia, which make them accessible for those who come even from rural parts of the country. But still government keeps covering the cost of those services while students are in the higher educational institutions. This makes the initial investment by government as a form of grants to cover not only the instruction costs but also food, dormitory and other service costs, before the first graduates begin to repay anything through taxation. This is very expensive and drives a lot of money from the government treasury which may constrain the public treasury to shoulder the burden in light of other competing and compelling services.

The other apparent characteristic of income contingent scheme is that it tends to forgo any mandatory parental contribution. According to the policy, it is only the graduate that is legally responsible for paying the loan after he/she graduates and gets employed. The policy does not make parents contribute for their children's tuition fee or other fee, for their food or accommodation. Everything is covered by the government and the students are expected to pay part of it in the form of graduate tax after they graduated and are employed. The assumption in most countries with parental contribution is that parents have some financial obligation for higher educational expenses as long as they are financially able. This is not only an extension of the assumption of parental responsibility for the general welfare of their children, but also based on the assumption of private benefits extending to the parents as the students (Teixeira, et al, 2006).

However in Ethiopia the focus is only on students. This is because, according to the Ministry of Education, the principle is that, students mostly join higher education at the age of 18 years and they are legally independent adults in most aspects of their lives. When it comes to higher education, therefore, there is no reason or legal basis to consider them as dependents on their parents. Thus, they have to pay their share by themselves. The other reason is, if the policy makes parents contribute while the students are in the university, it will be an obstacle for those families who cannot afford it (Teshome, 2003). By the time the students gradate from the university, on the other hand, they become both financially and legally independent form their parents so there is no need to hold their parents accountable for their loans.

Taking the Ethiopian context into consideration, though it is logical not to make parents 100% responsible for the share of their children's cost of higher education, it also seems inappropriate to make them 100% free from the obligation. This is because, though the students are legally independent from their parents, they are still economically dependent while they are studying. However the government is shouldering the burden of the student which otherwise would be on the parents. So making parents contribute a small amount, as upfront fee, for example for registration, food, dormitory and medical care, would not have a big impact on access, but it would mean a lot in terms of sharing the cost for the government. Most parents have already shown their willingness to pay for their children's education. A significant number of students are enrolled in fee-paying programs of the evening and summer courses in public institutions. In 2003/2004, for example, 53,780 students (31.2 % of total enrollment or 45.9 % of those in public institutions) were enrolled in the evening and summer programs in the public institutions. Therefore, the total student population that is practically fee-paying, in both public and private institutions, accounts for about 54% of the total higher education student (Teshome, 2005). These students, in practice, are not only paying tuition fees but also covering the full cost of food, room and transportation. Moreover, parents almost certainly derive personal satisfaction and status from the higher educational successes of their children. Thus, letting aside parental contribution from cost-sharing, might create some difficulty in generating adequate non-governmental money to supplement higher education finance.

2- Weak Collection Capacity

The other very important issue related to generating this revenue from cost-sharing is the system of tax collection. For income contingent system of cost-sharing to be effective, as we have seen in the second chapter, workable taxation systems that could be used to collect efficiently student charges on the basis of future incomes has to be put in place. This is a critical administrative issue, and it is fundamental to the prospects of the future success of the scheme. Ethiopia follows a federal form of state structure, like USA, Nigeria, and Australia, in which there is a federal government and nine different regions with their own administrative structures. This administrative structure grants each region the obligation as well as the authority to collect taxes on behalf of the federal government. Each region has its own system of administering the power vested in them, thus, some regions have more sound and up-to-the-standard tax collecting structure than others. Furthermore, while Ethiopia has a robust system of public administration reaching into many aspects of citizens' lives, the relationships between levels of government — federal and regional — are complex, with taxation arrangements being somewhat convoluted. According to the policy, there are different bodies of government which involve directly or indirectly in the process of collecting the graduate tax. These bodies include, Federal Inland Revenue Authority, Regional and City Administrations and Tax Collecting Organs, Ministry of Education and Ministry of Finance and Economic Development. According to the cost-sharing policy of Ethiopia, each and every employer whether in public or private, has to deduct the amount owed by the beneficiaries and transfer it to the Federal Inland Revenue Authority or to its delegates.

The challenge here is that, Ethiopia is one of the poorest countries of the world with a lot of political, social and especially economical problems. Unlike other industrialized countries, it is hardly possible to find well organized tax and banking system in Ethiopia to track and verify all sources of income for all borrowers for most of their earning life times, as Johnstone (2006) argued for the developing countries. According to the assessment made by IMF in 2004 for financial support in Ethiopia, the organization commented on the need for the tax reform program for the government which indicates the structural weakness that prevails in Ethiopian tax collection mechanisms. The report indicates that the Ethiopian tax system is characterized by weak taxpayer office with inadequate staffing and training, particularly in revenue collection, accounting, and audit functions, relatively loose enforcement mechanism which decreases the efficiency of income tax collection and recovery, absence of tax identification number for all citizens, inadequate auditing program to cover all taxes, including customs taxes and Incomplete or no computerization of the taxpayer registration process and so on (IMF, 2006).

Moreover, according to the conference held on the implementation of cost-sharing on June 6, 2005 in Addis Ababa, Ethiopia, the general manager of Federal Inland Revenue Authority, Mr. W/ Gebriel Naizghi, indicated the weakness in coordination of those bodies involved in the collection process (Federal Inland Revenue Authority, Regional and City Administrations tax collecting organs Ministry of education and Ministry of Finance and economic development.). He insisted that there is lack of an organized information channel between the Ministry of Education and the Revenue Authority, Regions and city Administrations Tax Collecting Organs. This can be a possible challenge to exert maximum effort for the proper implementation of the system without having proper communication structure among these bodies and without giving the necessary information concerning the student status, by formally and informally communicating with the Authority, Regions and city Administrations tax collecting organs thereby giving the necessary direction (Federal Inland Revenue Authority, 2006).

The tax/GDP ratio in Ethiopia is one of the lowest in the world amounting to only about 13% on average (Federal Inland Revenue Authority, 2006). This is because there is no effective tax system equipped with modern techniques and equipments that can enable to increase the tax revenue significantly. It has been challenging to get timely and accurate statistics on the income and tax level of citizens since there is no adequate and computerized recordkeeping in the tax system in Ethiopia. This has its own implication on the difficulty to increase tax revenue and higher tax/GDP ratio. Moreover, as we have seen above, the tax collection mechanism is highly centralized by the Federal Government. As a result of the centralized and backward system of record keeping, it would be very difficult to keep track of thousands of graduates leaving the higher education institutions after graduation and scatter in all parts of the country. All these indicate that Ethiopia does not yet enjoy the soundly-based, efficient and comprehensive income tax arrangements to effectively recover the loan through income contingent scheme, a system that characterizes the policy environments of Australia, New Zealand and the UK.

3- High Default Rate

There is also a high degree of uncertainty that a sufficiently accurate record-keeping system has been developed which maintains the records of each former student's repayments, progressive level of indebtedness and mobility. So far, as the policy document indicates, there is no administrative structure setup specifically to keep information about the graduate's mobility. It is up to the employer to send the share to the Federal Inland Revenue office. Information about the beneficiaries' whereabouts is not centrally or regionally well documented which may contribute for the rise of the default rate. Even though in the long run this could be developed, costly government bureaucracy to keep track of the increasing number of graduates may make the cost recovery even more expensive.

One of the positive sides mentioned by Teshome (2007b) and Chapman (1999) is that most graduates from universities in Ethiopia are employed in the public sector and, since their incomes are known with some accuracy, it is easy to track them through the already set government machineries. However, the fact is that cost-sharing in Ethiopia is not only set for university graduates who are, most of the time, employed in the public sector; it also includes graduates from Technical and Vocational Education and Training (TVET), in fact, they constitute half of the higher education graduates every year. For example, when the policy started in 2003, about 99,000 students were enrolled in technical and vocational education and training (TVET) institutions, while about 148,000 students were enrolled in universities and colleges, 29,000 of which graduated during the same year. According to the country's Sustainable Development and Poverty Reduction Program (SDPRP), 130,000 Students should be enrolled in (TVET) institutions by the end of 2004/05 (or equivalently 55,000 annual intakes) (MoE, 2005).

By their nature, TVETs train students in more practical means and are designed to meet specific needs of the society, like the construction sector, metal and wood works, textile and garment, food processing, vegetable and fruit, urban agriculture, and others. According to a joint survey made by Ethiopian Private Sector Development and the World Bank, in 2005, most graduates from TVET in Ethiopia are employed either in private small scale businesses or in their own micro firms. As we have seen in the second chapter, it is difficult to trace and collect the incomes of those graduates employed in first and second jobs in the private sector or that of self-employed graduates because it is very difficult to verify their incomes and much easier to hide the real amount of income they drive. Thus, it is challenging to trace, verify and collect the loan from TVET graduates which constitute half of the whole graduates every year. This is also related to the weak capacity of the tax system of the country as, the government depends mainly on the repayment from civil servants and perhaps those employed by multinational corporations and some large private enterprises, which is a big challenge in cost recovery.

4-Brain Drain

Student mobility to other countries, especially to the developed, is also increasing in Africa in general and Ethiopia in particular. An estimated 23,000 graduates and 50,000 middle and senior management personnel leave the continent each year. *"…it is estimated that about 30,000 Africans holding Ph.D.s live outside Africa and that 130,000 Africans are currently studying overseas..." (World Bank, 2002:18).* The largest migratory flows are from Egypt, South Africa, Nigeria, Kenya, Ghana and Ethiopia (Shinn, 2002). According to the Associations of African Universities, the problem of brain drain has reached quite disturbing proportions in certain African countries, with Ethiopia ranked first in the continent in terms of human capital loss rate, followed by Nigeria and Ghana. According to the International Organization for Migration (IOM), Ethiopia lost about 74.6% of its human capital from various institutions between 1980 and 1991. One third of Ethiopian medical doctors have already left the country. According to Randall Tobias, the United States Government's global AIDS coordinator, there are more Ethiopian-trained doctors practicing in the city of Chicago alone than in Ethiopia (Shinn, 2002) making the country the worst affected in Africa where the effects of brain drain have reached to an unaffordable stage. According to the study conducted by Ethiopian medical associations, 50% of medical science professionals in Ethiopia (which is a very expensive field) leave the country after graduation. The primary destinations for these professionals are North America, Europe, Australia, South Africa and the Gulf States (Ibid). Though there is no extensive study conducted in recent years on brain drain in Ethiopia, the experience Ethiopia had until 2003 indicate that, it is the worst country affected by all standards from brain drain in Africa. Among other things, the following are some of its effects:

- Reduces the already low quantity of skilled manpower available and needed for its development in the country
- Reduces numbers of dynamic and innovative people, whether entrepreneurs or academicians
- Increases dependence on foreign technical assistance
- Negatively affects the country's scientific output
- Money lost in income tax revenues and in potential contributions to gross domestic product

Both the push and pull factors play a vital role in accelerating brain drain in the country according to the study conducted by Shinn (2002) on brain drain in Ethiopia in the George Washington University "a higher income and standard of living, better career opportunities and prospects for professional development, and political stability are some of the pull factors that attract skilled man power to more developed countries" low wages and salaries, unsatisfactory living conditions, low prospect for professional development, lack of research and other facilities, social unrest, political conflicts and wars, lack of academic freedom are some of the push factors pointed out in the study.

This migration of university graduates has its own implication on the process of cost recovery process in cost-sharing. Taking all these realities into consideration, a considerable number of graduates could leave the country every year looking for better lives without paying their debt. Though the policy clearly states that upon graduation and employment (self or other), the beneficiary has to inform the Federal Inland Revenue Authority of the full address and place of work and residence as well as prior employment; there is no legal enforcement mechanism so far specified by the policy in case of none compliance. This also makes the default rate to rise throughout the year.

Recently, recognizing the above problem, the government has setup a regulation to restrict the movement of graduates outside the country without paying their debt. According to the regulation, if a beneficiary decides to leave the country for more than six months before completing the repayment, the person is required by law to provide a guarantor for the outstanding payment. Although this is a desperate measure from the government, it is hardly possible to put it into effect for the following reasons. The first reason is that after consideration of the right to freedom of movement which is enshrined in the country's national constitution, The Main Department for Immigration and Nationality Affairs has announced that as of 26th July 2004, exit visa in Ethiopia is no longer required. Since that date, any Ethiopian or foreigner living in Ethiopia may leave the country without an exit visa, which could have served as a point of control of repayments. If the government requires clearance before leaving the country, it will be against the basic principle of the constitution of the country and against the declaration of the Immigration Office. The second reason is that it is totally based on the willingness, honesty and responsiveness of the beneficiary to produce a guarantor, after graduation and when he/she plans to leave the country. It will not be easy also to ask the guarantors the amount of money they have signed once the beneficiary has left the country, which will mean that the government would go through expensive and time consuming legal procedures to handle the case of each and every graduate. Thus, mobility of graduates without adequate recordkeeping or information will remain one of the greatest challenges of cost recovery in Ethiopia.

On top of the above challenges, there is still a great deal of uncertainty about where the collected money will go to. The responsibility to collect the money from the graduates is clearly designated to the Federal Revenue Authority, according to the policy (EPRDF, 2003b). Higher educational institutions do not have any direct involvement in the collection or allocation of the money. It is the government that decides every fiscal year the amount that is going to be allocated for each sector including higher education. That means, there is no guarantee that the higher educational institutions would receive exclusively the additional funding raised through cost-sharing. It all depends on the commitment of the government to develop a credible and transparent mechanism by which extra revenue would be dedicated to higher education. Without a credible system which makes the money flow directly to higher education sector, it will be a challenge for higher educational institutions to design dependable plans based on the expected earnings from cost-sharing.

These are some of the major challenges that the current cost-sharing scheme is facing in its implementation. Despite the challenges and possible problems of cost-sharing Ethiopia is facing, there are also opportunities or prospects that can be derived, if properly implemented. In the next chapter after a brief summary of the above points, we will see the prospects of cost-sharing and recommendations for the challenges we discussed. Before doing that however, let us see how income contingent addresses the issue of access in Ethiopia.

4.5 Cost-Sharing and Access in Ethiopia

Access to higher education in Ethiopia is still elite based with the participation rate of less than 5%. This situation was much worse before the 1994 education policy reform. This was because higher education was provided exclusively by public universities which made access to higher education more competitive than ever. Only those who scored the highest grade were able to join these limited places in only 8 public universities in the country. Moreover, since most of these universities are in the metropolitan or urban areas; access to these universities even in the evening programs favors only those who are close to them. Given significant differences in income and education attainment levels across regions in Ethiopia, access to higher education often favors students from upper-income homes, especially those from urban areas in the most prosperous regions.

But after the reform measures which were started in 1994 and more developed in 2003, access to higher education has shown a relative development. One of the reasons for this could be private higher educational institutions have been permitted to operate in the country alongside the public universities. These private institutions offer educational programs often not available in the public institutions, provide access to growing numbers of students who might otherwise not be admitted to higher education, enable a significant expansion of higher education enrollments at very little additional cost to government (Tuition fees run from Birr 2,500 to 3,500 a year (US$300–450) (Teshome, 2007b)), and provide client-oriented instruction focused on the shifting needs of the job market. Since 1994 private higher education is rapidly expanding part of Ethiopia's higher education system, increasing by 43% in the past year alone and in 2007 accounting for 24 % of all tertiary enrollments.

With the introduction of cost-sharing in Ethiopia in 2003, the government began investing a huge amount of money on higher education hoping that the money eventually recovered from graduates will subsidize the huge capital investment. Since 2003 thirteen new public universities have been built up with the cost of more than $1.4 billion (Ministry of Education, 2007). These universities have been constructed in different corners of the country to allow students from rural areas to participate in higher education more easily.

As we have seen in the second chapter, access and cost-sharing are centers of discussion among different academics. There are writers that argue that cost-sharing hinders access to higher education especially for students from poor socio-economic backgrounds for a simple reason that students from lower economic background may not have the money to share the cost of higher education. Even though loan is provided to all students, the burden of repayment would not be the same for all students. Thus, those poor students will be discouraged to take loan and go to higher education institutions. On the other hand, there are also other scholars who argue that, it is not the presence of cost-sharing that creates problem on access; rather, it is its absence that will limit access. Their argument is if there is no cost-sharing, there will not be alternative non-governmental money to supplement higher education, and without additional money it is difficult to expand access with government's budget only. Thus, cost-sharing means more money, and more money means expanded access (see section 2.4.2 for more discussions).

Here, the discussion should not only be on the presence of cost-sharing and its impact on access, but also on the type or scheme of cost-sharing versus its impact on access. As we have seen in the beginning of this chapter the Ethiopian higher education has faced and suffered a lot of austerity and there is no doubt that the cost of higher education has to be shared among beneficiaries. Though there are different kinds of cost-sharing schemes, Ethiopia has adopted income contingent which makes the issue of access more pragmatic. This is because in principle, income contingent scheme is one of the best ways to tackle the problem of access in cost-sharing for the following reasons.

1- One of the issues associated with access to higher education is *ability to pay*, especially for those from poor socio-economic background. If the scheme adopted is supposed to expand access, then it has to take this into considerations. In this respect, income contingent is the best solution since it does not require all students, poor or rich, to pay any kinds of fee at the time of study. Thus, no one will be denied access because of his/her financial status.

2- The other related issue to access in higher education is *the availability of loan for all*, even for those who cannot provide collateral or guarantor. In the case of income contingent loan, the loan is available to all students from all backgrounds, as the government is the guarantor. So it does not hinder students from getting into higher education institutions based on their ability to provide collateral for loan and the loan is also available for all potential students.

3- The other issue related to access to higher education is *risk aversion*. That means in some cases, student may be reluctant to take loan for their higher education in fear of unemployment after graduation and thus inability to pay back their loan. But this is not a problem in the case of income contingent since the beneficiary pays his/her loan only after graduation and only if he/she is employed.

4- The other issue is *the burden of repayment*. This is the fear that the amounts the student will earn after graduation may not be good enough to pay his/her loan, even though he/she is employed. So it becomes a burden for graduates. However, since the amount that is to be repaid in the case of income contingent is set according to the income levels of each and every student, this will not be a problem and it is equitable. From these points of view, cost-sharing does not have a considerable impact on limiting access to higher education in Ethiopia.

On the other hand, Sub-Saharan African countries, with relatively same socio-economic backgrounds, are following a different track as we have seen in the second chapter. Starting from 1992, Tanzania for example has adopted a new form of cost-sharing which has been implemented step by step and gone through three phases (see section 2.6.1). This loan however, is available only for those students who have high academic scores and for those who have been identified in the loan regulations as orphans, disabled or with disabled parents, from poor or single parent family; from marginalized and disadvantaged groups; and low income threshold families. In such cases there is a need for well established mechanism to identify who is from low income families and verify family incomes. It is also the case in dual track tuition policy and means testing in Uganda and Kenya. As we have seen in section 4.3.3 however, it is very difficult to verify family incomes in developing countries like Ethiopia. Thus, income contingent is more appropriate for countries like Ethiopia taking their socio-economic conditions into consideration.

The issue however is, if the government is covering all the initial capital needed related to instructional costs(for the teaching and learning process), administration costs(registration processes, running institutional bureaucracy, coordinating different service sectors of the university) and service costs(cost of food, dormitory, basic medical services and other services), with all institutional and administrative problems related to collocation of repayments and with high default rate, it is unlikely to generate more non-governmental revenue as expected. If the non-governmental revenue generated from cost-sharing cannot grow in proportion along with the increasing initial capital investment made by government, the current plan of expanding access from exclusive enrollment of 1-3 % to 5 % and beyond, could not be achieved. In simple words, loans that cannot be collected effectively will not generate non-governmental revenue to expand access.

Thus, unless government decides to lift up some of the initial investments for some basic services like food, dormitory, basic medical and other services step by step just like the case of Tanzania; it will be a challenge to expand access. Cost-sharing has to be successful in generating non-governmental revenue for further investment.

Though the above point is true, it is hardly possible to generalize whether cost-sharing has a negative impact or not based on its ability to generate non-governmental revenue for further investment in the sector. The Ugandan case can be a good example; the alternative cost-sharing scheme adopted by the Ugandan government is a dual track tuition policy. In such scheme, the government sponsors only about one quarter of total university entrants, based on a set of criteria (see section 2.6.2). These students are fully financed by the government which includes tuition fees, room and board. The students that do not receive government sponsorship have to finance their own education. Thus, to be enrolled in higher education institutions, one has to be either academically outstanding (to get sponsorship), or financially able. This scheme, as we have seen in the second chapter, leaves out a significant number of students especially from poor family backgrounds. Ironically however, the dual track tuition policy in Uganda has been successful in terms of generating significant revenue. For example, 80% of Makerere University's students pay tuition, which accounts for more than half of the University's total revenue (Nakanyike and Nansozi, 2003).

From these, we can understand that the two things, ability to generate additional non-governmental revenue and the fact that no student has to be left out from accessing higher education because of his/her poor financial status- have to go together in order to address the issue of access in cost-sharing. There are at least two alternatives so far to address this problem, either adopting a means tested loan system for those who cannot afford as in the case of Kenya or providing loan for everyone without going through their family background like income contingent scheme of Ethiopia. As we have seen above, in the case of Ethiopia, it is difficult to implement a means tested loan mechanism. This is because it is very difficult to test family incomes, plus it is technically difficult to ascertain and verify incomes and assets since many families use banks seldom or not at all. Banks may also have little or no ability or inclination to link either deposits/withdrawals or interests paid on accounts to individuals and to share this information with authorities, and moreover, the market value of real property may not be clearly known.

Thus, income contingent is relatively the best way to address the issue of access in higher education in Ethiopia without discrimination or assessment of family economic status. However, there is a lot to be done in order to minimize the default rate and improve the institutional capacity to recover the loan from graduates in the Ethiopian case.

The Ethiopian higher education system has been facing financial problems which are derived by some forces among which the common ones are, demand pressure, the high and increasing per-student cost and the decline in available public revenue. Thus, in order to supplement governmental revenue, to address the question of equity in terms of opportunity, to expand access and the efficiency of the system, Ethiopia has adopted cost-sharing in the form of income contingent loan scheme. Though the policy is necessary to diversify higher education finance, cost-sharing in the form of income contingent loan is not free from challenges in the Ethiopian context. Among other things, lack of awareness among the stakeholders, dependence on donors, extended recovery period, inadequate autonomy for universities and freedom of choice for students, excessive government subsidy, high default rate, weak tax collection capacity, brain drain and weak recordkeeping of the mobility of graduates are the major ones. However, as compared to other forms of loan systems or cost-sharing, income contingent is more convenient to address the issue of access in Ethiopian context for the reasons explained above. In the next chapter, we are going to summarize the whole discussions of this paper and forward some recommendations for the challenges the Ethiopian cost-sharing is facing.

Chapter Five: Conclusion

The importance of higher education for socio-economic and political development has been recognized by most countries for a long time. Higher education instantiation has been contributing in the development of trained man power and various research activities. Despite its significant role in the development process however, the sector has been facing financial austerity. This austerity has been by far more serious in developing countries than in developed countries. The financing of higher education has been the soul responsibility of the government and higher education has been provided for free for a long time, especially in developing countries like Ethiopia. The rapid and high population growth which characterized most developing countries, that put a great deal of pressure on the enrollment patterns of both basic and higher education, the growing importance of higher education for better employment and life, the expansion of the university system with new specialized trainings and more professional course and development of democratic values which bring those groups traditionally left out from the system, puts a great deal of pressure on higher education demand. This expansion demands the building schools and universities, the training of teachers and managerial staff and integration of the education systems with the rapidly expanding technological innovations.

Because of the increasing demand pressure with limited government revenue and the continuously rising cost of higher education, it becomes apparent that higher education can hardly continue to provide service for all who need it with only governmental revenue. This fact is even more pronounced in developing countries where there is scarcity of tax revenues as well as the long and compelling queue of competing public needs like, pure water supply, healthcare and HIV/AIDS, electricity, road and other basic infrastructural needs. Recurrent human made and natural calamities like civil wars and drought and other emergencies also take a portion of government money. Most developing countries have very low higher educational participation rate and the worst is in Sub-Saharan Africa which is about 5%

making it clear that there is a great need for additional non- governmental revenue to expand access and improve quality of higher education.

Thus, sharing the cost of higher education with those who enjoy its benefits, is an appropriate solution to generate non-governmental revenue in order to expand access and improve quality. Cost-sharing is the transfer of higher education cost from government or taxpayers to students and/or parents (Johnstone, 2003). This may be through the introduction of, or sharp increases in, tuition fees to cover part of the costs of instruction or of user charges to cover more of the costs of lodging, food, and other expenses of student living that may have hitherto been born substantially by governments (taxpayers) or through the introduction of small, non-instructional fees, the freezing or diminution of student support grants, or the channeling of more students into a tuition-dependent private sector or other forms like the so-called dual track, or “parallel” tuition fees (as in Kenya), provided that students who are not academically accepted into the small and selective pool of students whose education is fully state-supported may still be admitted for a fee or still another form, called the income contingent loan, which was developed and popularized by Australia. This scheme is a tuition fee that is deferrable for all or most students as an income-contingent loan to be repaid only after the student borrower is employed and earning a salary (Chapman, 1999).

This chapter will summarize the adoption of policy of cost-sharing in Ethiopia, its challenges and prospects. From the analysis of challenges of cost-sharing in Ethiopia, the chapter also suggests recommendations for future reforms and developments of the policy.

5.1 Introduction of Cost-sharing in Ethiopia – Challenges and Prospects

The higher education system in Ethiopia has been characterized by an elite system with very low enrollment rate of only 0.8% (Teshome, 2003). With the growth of the population which mounts to be the third most populous nation in Africa and with relatively high primary and secondary school completion rate, the demand pressure on higher education in Ethiopia for the limited place available, has been increasing through time. Even though the number of students enrolled in higher educational institutions in Ethiopia is growing every year, according to the recent indication, the participation rate is still very low even by the Sub-Saharan standard. Though the government budget allocated to higher education sector has been increasing every fiscal year, the rise of the per-student cost every year makes the public budget incapable of expanding access to all potential students. Moreover, as in many poor Sub-Saharan African countries, there are other competing public interests which need public funding. Ethiopia needs to expand its higher education to produce the highly trained human resource that is critically required for development and for poverty alleviation. Thus, diversifying higher education financing with non-governmental revenue through cost-sharing is an appropriate measure.

Though cost-sharing can be implemented in different forms like, upfront tuition fees (or other fees), grants (especially means-tested) and student loans (of whatever form), the introduction of income contingent loan system instead of mortgage or means-tested loan system or upfront fee in Ethiopia is relatively appropriate for the following reasons:

1-Unlike other kinds of cost-sharing which requires upfront fees, income contingent loan does not require students to pay their tuitions while they are studying. In this case, either the student has to have money to pay upfront or he/she has to able to manage to get loan by showing some collateral or guarantor. This has its own effect on the participation of students especially with poor family profiles since they may not have money to pay upfront or to show collateral to get loan from the bank. But this is not the problem in the income contingent loan because the government is the guarantor and students are only expected to pay their debt after they are employed.

2-The other alternative mechanism implemented by some countries is means- tested loan system, or dual track loan system, in which case there must be a means to identify those students who need loan or grant. In most cases, family income is the mechanism to differentiate them. In the United States and most of the OECD countries, both earned income (from wages and salaries) and unearned income (interest, dividends, and rents) are generally known and voluntarily reported, making financial means relatively easy to verify, generally from income tax returns. In Ethiopia however, income or earnings may be from multiple sources, often erratic, frequently not reported or even recorded, commonly noncash, and sometimes involving large extended families. This makes it very difficult to implement the means-tested cost-sharing mechanism. Income contingent loan however, does not take family income into consideration which makes it easy to handle.

However, the implementation of income contingent scheme is by no means challenge free. In theory, cost-sharing has the objectives of taxpayer revenue supplementation, revenue diversification or income generation and expanding higher education accessibility, equity promotion, or enhancement of participation. Though it is difficult to conclude whether income contingent loan system is successful or not at this stage in Ethiopia, it is possible to point out basic challenges it is facing taking the socio-economic condition of the country and the theoretical expectations. Thus, this study identifies the major possible challenges of income contingent cost-sharing in Ethiopia. The challenges can be summarized as follow:

- Dependence on donors for initial investment and uncertainty of commitment from the donor's side.
- The fact that income contingent scheme does not provide immediate non-governmental revenue for the urging austerity that Ethiopian higher education is facing right now.
- The scheme leaves out 35% of graduates from repayment of their loan
- The government is still providing food, accommodation, basic medical services and other services without upfront fee, for all students which currently claim15% of the budget.
- Weak tax collection capacity, manifested by lack of personal income identification number, lack of computerized tax collocation mechanisms, weak coordination among different bodies in the collection process, highly centralized institutional bureaucracy, weak auditing techniques and inadequately trained personnel.
- Lack of well organized and computerized recordkeeping on the mobility of graduates
- Weak enforcement mechanisms

- Difficulty to track those employed in the private sector, small businesses and other small micro firms
- Brain Drain
- Uncertainty whether the collected money from cost-sharing will exclusively be allocated to higher educational institutions or not.
- Difficulty to implement the concept of "students as consumer" because of lack of student choice where and what to study plus lack of institutional freedom to recruit their own students as they want.
- Lack of awareness about the policy of cost-sharing among university communities.

These are some of the major challenges that the current cost-sharing scheme facing in the implementation process. Despite the challenges and possible problems of cost-sharing Ethiopia may face, there are also opportunities or prospects that can be derived, if properly implemented. Among other things, the following are some of the trends that can emerge in Ethiopian higher education sector from the adoption of cost-sharing.

5.2 Possible Developments or Emerging Trends from Cost-Sharing in Ethiopia

1-No More Free Higher Education: The free provision of tuition, food, and lodging until 2003 in Ethiopia has left an established outlook that higher education should be free and that government should be responsible for financing higher education. However, after cost-sharing has come into the policy table and been implemented, the mindset among different groups of people has changed. Most people, according to a survey made by Teshome (2007a), are now convinced that higher education should not be free. This is a good prospect, there is no turning back to the way things were, to the time when students were provided higher education for free. There will be many debates and researches among academicians and policy makers about how the implementation should take place and how things should be done, but there sure would no more be free higher education.

2-Cost-sharing has Potential to Generate Non-governmental Revenue: If the process of cost recovery in the Ethiopian cost-sharing scheme is properly managed and if there is an improvement in the institutional capacity to carry out this task in an organized manner, cost-sharing has a prospect of helping generate non-governmental revenue for the expansion of higher education in the country by bringing in more money to the education budget allocated by the government each year. In fact this is the core objective of cost-sharing in higher education. But if it is not properly managed and if effective institutional setup is not put in place, it will not generate the intended substantial non-governmental revenue because of high default rate and administrative costs.

3-Cost-Sharing has Long Run Benefits: The process of cost recovery may not seem promising for a short time because as we have seen in the previous part of this chapter the full recovery starts after 10 to 15 years. Nevertheless, in about 20 years, when non-governmental revenue will be recovered, assuming appropriate institutional setup for collecting the money put in place, cost-sharing has the prospect of playing decisive roles in increasing the institutional efficiency, improving the quality of education and expanding higher education access.

4-Cost-Sharing has a Prospect of Incorporating the Market Value: In developed nations where cost-sharing has a well established root, the practice has adopted market value to higher education institutions. Values like efficiency, consumer demand driven production, responsiveness plus providing the opportunity for students to make rational decision where and when to study based on the available choice with adequate information. The same thing will apply in Ethiopian higher education, if the principles of cost-sharing fully mature, and if the government lets institutions recruit their own students and students to choose where and what to study. Thus, higher education services will be more consumers responsive and demand oriented which will result in competition among universities to attract the maximum number of students, because students as customers will be provided with the choice of a university of their interest. This entails the improvement of the quality of education and other services the universities provide.

5-Cost-Sharing has a Prospect of Expanding Access: If legal and institutional provisions set to guarantee the flow of the additional non-governmental revenue generated from cost-sharing exclusively to higher education and all the money collected from cost-sharing is invested back on higher education, it will help to open new universities, increase the capacity of the existing ones and expand access to higher education in the country.

For the challenges that the Ethiopian cost-sharing scheme is facing however, there are some possible recommendations that may help dealing with those challenges.

5.3 Recommendations

Taking expanding access and improving quality by generating non-governmental revenue as the major goals of cost-sharing, the following are some suggestions to improve the challenges that cost-sharing scheme in Ethiopia may face. These suggestions are by no means prescriptions and are subjected to further development and discussions. Since the income contingent loan recovery system cannot generate immediate revenue due to the delay in the complete retrieval of the money from students which takes 10 to 15 years, and because of other institutional and technical difficulties, income contingent may have high default rate in Ethiopia. However, if the following measures are taken, it will improve or advance the effective implementation.

1-The current practice of covering the full cost of students' food, lodging and other services while students are studying is costing 15% of the higher education budget every year. Thus, if the budget allocated for such services is reduced from 15% to 10% and if it makes the students cover at least 5% of the cost in the form of upfront service fee as a service charge, such as registration fee, internet service, sports clubs and student union membership fees to be charged by the universities themselves, I- As a result, this method will help generate a direct revenue for the universities, II- it can be used for the expansion of the system and for improving quality and the recovery rate of the loan. This upfront fee, (5% of what currently the government is paying for services) is a very small amount so that everyone can afford it. However, to avoid inconveniencies for some students, the payment should assume high flexibility as to allow the students to pay it at a time suitable for them but it has to be paid while they are in the university. Here, parents may have a role in contributing for their children's services too. This gradual or step by step transfer of fees is a tested and proven method. As we have seen above, it has been implemented in Tanzania. This method would not have any impact on access and equity in income contingent case for the following reasons. First of all, government still pays the full instructional costs or tuition fees while students are undergoing their studies. This will only be paid upon graduation in the form of income contingent payment schemes. Secondly, an insignificant amount, only 5% will be covered by students as full tuition will be covered by government in addition to the remaining 10% of service charges. Lastly, since these upfront fees will assume their maximum flexibility, if there are still some students who cannot even afford such a small amount can benefit from the limitless extensions on payment which will be applicable until they graduate.

2-As stated in the Higher Education proclamation, graduates pay only 10% of their income as they graduate. However, since these people as degree holders are the better off parts of the society by any standard, their salaries are higher than the average community. Thus, the repayment of only 10% of their income is not enough; the repayment rate should be raised up to 15%. As much as this would have a good impact on the loan repayment process by shortening the duration of complete retrieval, it certainly would not affect the livelihood of the payers since they are relatively better-off. This may raise a genuine concern that the rise of the repayment from 10% to 15% will make graduates leave the country without paying or lead them to tax-evasion. However, these graduates will earn relatively high salary and are the better off in the society even if they pay 15% of their income. So the 5% increase may not have an impact on brain drain or tax-evasion. But extensive survey on the effect of any increase on tax and its impact on brain drain and tax-evasion are recommended for successful implementation of any present increase on income tax.

3-The justification for letting 35% of the graduates free of paying their higher education cost assuming that they will pay it in their service, is over emphasized. Sparing 35% of the graduates of direct payments lowers significant non-governmental revenue needed for higher education. This fact is also strongly emphasized in the World Bank document (2003). The exact amount to be recovered from national services by these would-be-teachers may not be quantified. Thus, the exact amount to be repaid through service is not clear on top of the fact that not all would-be teachers would be employed in public schools. Instead of overlooking their entire direct payment contribution, which is 10% of their salary as the other graduates, it would be much better to make them pay at least 3% instead of 10% of their income and cover the rest through national service. This (3%) will in fact have an insignificant effect on the graduates. As a consequence, no matter how small the amount is, it will contribute a lot in the recovery process.

4-Though it is a good idea to collect the recovery through the already established tax channel to make things easy, it would be much easier if the Ministry of Federal Inland Revenue supported by other independent bodies takes the responsibility for recording and documenting the graduates' movements, and employment status especially of those who are employed in the private sector and in case of non-compliance. This body can also be an agent for awareness creation among the students and the administration by providing the necessary information about the implementation processes, vantages and other technical support needed for the smooth running of the policy. Thus, organizational restructuring in this respect would facilitate the efficiency of the recovery.

5-The current cost-sharing practice very much limits the role of the universities in determining the number of students they enroll which is the task of the Ministry of Education. At the same time, students choice about where and what to study is very much restricted by the Ministry of Education since it is the Ministry which assigns students in different institutions. In order to bring market values into the system, this has to be changed. Thus, students should have the right to choose the university and the program they want to study and the universities also should have the autonomy to recruit their own students based on their interests. This will result in greater motivations of students to contribute to the genuine service they are receiving.

6-Implementing modern computerized tax system is also very crucial not only for cost-sharing recovery but also for better tax generating capacity and the country's economy. The enforcement mechanisms and legal provisions have to be improved and clearly explained for graduates and students to make them aware of their involvement. In this regard, the media can play a crucial role in the process of awareness creations. Higher educational institutions also must have a mechanism to check whether the recovered money is reinvested on higher education or not. This kind of administrative and technical improvement would contribute for the success of the policy.

7-In addition to the traditional universities, there are vocational and technical training colleges in Ethiopia. But there is no clear regulation or mechanism for graduates of these institutions to further pursue their degree in the universities. So, in most cases after they graduate from these technical institutions, if they want to continue their education, they have to start from the first year just as new students in the university. But if there is a mechanism that can facilitate a smooth transition from technical colleges to universities, students will have better motivations and courage to go these vocational institutions.

8- In Relation to the above point, to achieve the objective of expanding access in higher education, diversifying the system is important It is possible that the costs of an expanded higher education system may encourage government to consider the option of sub-degree qualifications; building on Grade 12 study (say a higher certificate after one year of post and a higher diploma after two years) as an alternative to bachelor degrees for some students and also to consider post graduate certificates and diplomas, rather than masters degrees, for professional upgrading of some graduates. Such a range of qualifications, each embedded within a degree program, requires the creation of a qualifications framework and credit accumulation system. Higher educational institutions could think about whether they would consider such a development desirable, whether they should lobby for it, whether they should collectively design a credit framework, how they would integrate such qualifications into their existing programs and their possible value for attracting more students

9-Finally, strong commitment from all stakeholders is necessary to make the objectives of cost-sharing reality in Ethiopia and to successfully implement income contingent scheme. Strong commitment in fulfilling their respective responsibilities from both students and university administrators is needed. This is actually a function of having enough knowledge about the objectives, implementation and procedures of the policy which is not the case now in Ethiopian as we have seen in section 4.4.1.

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