

Finance Driven Reforms in Ethiopian Public Universities: The Cost Sharing Policy and its Implication for Equity

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Abstract - This study examines the implication of higher education cost sharing policy for equity. Accordingly, its contribution to and influence on equity at access level, at process level and outcome level was examined. The research employed a concurrent embedded Qual-quant Mixed methodology. Data were obtained from MoE, Ethiopian Revenue and Customs' Authority (ERCA), Universities managements and students, employer organizations and employees using interviews, FGDs and Questionnaire. The qualitative data were analysed using thematic analysis while the quantitative data were analysed using One-Way ANOVA, independent t-test, mean, and percentages. Accordingly, the findings revealed that at access level the contribution of the scheme in the entire effort of expanding public universities was assessed using the data from the past five years and the contribution of cost sharing was found very minimal, by contributing less than one per cent of the total budget allocated for expansion of public universities. Similarly, the influence of the scheme in on equity at process level was measured in terms of its impact on differential academic treatment for needy students as well as its influence on their choice of field of study. The result indicated that the existence of cost sharing didn't promote about differential academic support for needy students and also it didn't influence students' choice of field of study regardless of the difference in the amount to be sharing in different disciplines. At outcome level, the influence of the scheme on graduates further education and job mobility was examined and the result indicated that the existence of cost sharing strongly influence some individuals, who do not have strong financial capacity, not to proceed their further education. Likewise, the scheme affects those who agree to share the cost through rendering service, again if they don't have financial capacity to pay in cash, not to search for better jobs until they finish their obligation. Thus, at outcome level the scheme is highly promoting and sustaining equity among graduates. Finally, the results indicated that the lack of coordination among the implementing organs such as MoE, ERCA, Universities, and employers is seriously crippling the implementation of the scheme and breeding irregularities in its implementation.

Keywords - Cost Sharing, Finance Driven, Models, Equity, Public Universities.

I. INTRODUCTION

Among the global daunting challenges of the 21st century higher education are inequitable provision, serious problem related to quality, and increasing internal and external inefficiency (The World Bank, 2010, 2012). The World Bank stated that the mother of all these challenges is the problem related to financing the sub-sector which, for long period of time, has been exclusively shouldered by governments. As a result, governments started to look for alternative mechanism to support the financing of higher

education. One of the viable options was found to be the cost sharing scheme whereby the beneficiaries are required to cover some portion of their higher education costs.

One of the prominent scholars in the area of higher education financing; Johnstone, (2004), describes cost sharing as a shift of some of the costs that were once borne predominantly or exclusively by governments or taxpayers, to being shared by parents, students and other non-governmental sources of revenue. Cost sharing is basically a phenomenon in the USA back in the 17th century where

public and private funds have commingled since the establishment of Harvard College in 1636 (Bailyn, 1986; and Theilin, 2004a). However, despite its early conception it did not take momentum up until the second half of the 20th century in most developed nations and until the beginning of the 21st century in most African countries (Theilin, 2004a). concerning the factors triggering the introduction of cost sharing, Woodhall, (2004) discussed that the need for cost sharing mainly derived by critical financial austerity and fuelled by increasing demand for higher education in most countries.

Regarding African countries, cost sharing was introduced particularly during the 1960s, with strong recommendations from the World Bank when most of the countries in the continent got their independence and started to look for skilled manpower for their development which urged expanding higher education amidst limited governments' budget (Wangenge-Ouma, 2012; Taylor & Morphew, 2014). Accordingly, countries such as Ghana introduced cost sharing in 1971, Kenya in 1995, Namibia in 1997, Uganda in 2002, Ethiopia in 2003, Rwanda in 2003, and Tanzania in 2005 (Gichuhi, 2015; Ishengoma, 2004; Yizengaw, 2007). As discussed by Gichuhi (2015), since most African countries who were struggling to stand on their own foot on the aftermath of their independence could not shoulder all the costs of higher education provision, the beneficiaries were required to share some of the costs of the sub-sector. So, in this sense cost sharing was seen from its economic advantage point of view. In addition to its economic advantage, there is strong conviction that cost sharing plays strong role to promote equity in the provision of higher education (Johnstone, 2003, 2005; Wangenge, 2004; Ishengoma, 2008; Taylor & Morphew, 2015).

The Ethiopian higher education has undergone fundamental reforms at different echelons all the way from the system level to the program level, especially after 1994. The remarkable reform undertaken since 1994 starts with the introduction of new Education and Training Policy which serves as a roadmap for other consecutive education policies and directives designed then after. Following the introduction of the new education Policy the major reforms undertaken in the sector include; the establishment of agencies for HE quality assurance and strategic issues, the introduction of cost sharing policy in public Universities, the implementation of Business Process Reengineering (BPR), the introduction of modularization and the 70/30 professional mix policy (Tebeje, 2012).

Regarding the education share in Ethiopian economy, a DFID study by Penrose (1998) indicated that the country spends 5% of its GDP and about 24% of the total annual government expenditure on education. The study further indicated that this expenditure is greater than what India, whose per-capita income is almost four times as much, spend and only a little less than that of South Africa whose per-capita income is about 14 times that of Ethiopia. Concerning the budget share of the HE sub-sector, a report by Ministry of Education, (MoE, 2014) put that the sub-sector consumes about 40% of the total budget allocated for the education sector. The report of the Ministry also indicated that about 90% of the funding is exclusively covered by the government.

Cognizant of such massive resource consumption of the higher education sub-sector, the government introduced a cost sharing policy as of 2003. The policy is considered a landmark measure in altering the long standing trend of exclusive government financing of higher education sub-sector. The first cost sharing regulation, which was referred to as the Council of Ministers Regulation No.91/2003, was replaced by the Regulation No. 154/2008 with some modifications. In fact, the concept of cost sharing in Ethiopia's HE system emerged for the first time in the 1971/72 Education Sector Review (ESR) document as one of the recommendations to improve the quality of education, though left without being materialized by the time.

Teshome (2007) discussed that the unprecedented increase in University students' enrolment as a result of remarkable expansion of higher education institutions coupled with critical shortage of budget forced the government to look for various options to support the public financing of HE. Accordingly, cost sharing was considered a viable option whereby the beneficiaries are required to partially support the government in financing the sub-sector. Apart from its financial contribution, the policy was believed to; ensuring equity, promoting quality of education & improve efficiency in HE. The cost sharing scheme requires public University students to cover 15% of their tuition fee, and full cost of their food, and accommodation services (Teshome, 2005).

1.1. Context of the Study

When University education began in Ethiopia, students attending regular University programs used to enjoy free accommodation, food, and even some pocket money (Teshome, 2007). True that, at the time the number of students enrolled in HE was very limited and the expenditure was within the government's reach to fully

subsidize higher education, creating a general perception about a fully funded government sponsored higher education in the country. But, as the number of universities and the resulting students' enrolment increase from time to time, huge expenditure on HE started to jeopardize other sectors. For instance, currently about 25% of annual national expenditure goes to education, of which the share of higher education is about 40% (MoE, 2014).

A study by UNESCO Institute for Statistics (UIS) also attested that Ethiopia spends more than 1.5 per cent of its GDP on HE in 2010, which positions it as one of the top eleven HE spending nations in the world and the highest expenditure on HE in sub-Saharan Africa (UIS, 2010, cited in Tebeje, 2012). Therefore, such conditions justify the necessity for the introduction of cost sharing in order to support government's expenditure on the sub-sector.

Accordingly, the government attempted to implement cost sharing in the year 1999/2000 due to financial austerity on one hand and high demand for higher education on the other. By that time, the model proposed was a mortgage loan type which was to involve Development Bank as lender. However, due to the outbreak of Ethio-Eritrean war, the attempt was not materialized for political as well as economic considerations (Teshome, 2007). In the meantime, as Teshome explained, the committee charged with this task was made to explore the experiences of other countries in relation to cost sharing, which finally ended up with the adoption of the Australian model of Higher Education Cost Sharing Scheme

There are three types of cost sharing beneficiaries/students; those who want to reside outside of the campus and hence take the loan in cash only for food (450 birr per month) and room (60 birr per month), those who want to live in the campus and borrow only the food expense; the 450 birr per month, and those who want to get all the services including food and room from the campus. Students from better-off families usually opt for the first one because they borrow the money, supplemented by their parents and get better quality food than the one served at universities' cafeterias.

Similarly, there are two options of repaying the cost sharing after graduation. One option is to repay the amount borrowed together with its interest by deducting at least 10% from monthly salary/income. The other option is to render service for the period equivalent to the duration of their education. This second option is particularly for the graduates of teacher education and health (FDRE, 2008). As presented above, by the time the cost sharing policy was

introduced, the Ethiopian higher education was struggling with the problems of inequitable access for students from different backgrounds; gender, geographic location and minorities due to limited space in public Universities (Teshome, 2007; Emnet, 2008).

Therefore, the major assumptions of the cost sharing policy were to alleviate the problem of inequity and other challenges in Ethiopian higher education. Teshome (2007: 2) with reference to FDRE, (2003b) summarised that the cost sharing policy was supposed to:

- Contribute to the expansion of higher education institutions, which might be difficult by government expenditure alone, and support equitable access to HE for every deserving student from every socioeconomic strata;
- create cost sensitive institutions and students and thereby promote efficiency in the higher education institutions;
- develop a sense of 'value for money' among university students which in turn is supposed to make them responsible for their learning and ultimately contribute to the improvement in the quality of students' learning;
- create customer-like students who actively involve in the activities of the universities as well as influence the strategies of the universities in such a way that it satisfies their interest

In short, these core policy assumptions were meant to support the government's effort to realize the provision of equitable higher education, quality students' learning and efficient higher education system.

1.2. Statement of the Problem

It has been adequately discussed by writers in the area of HE such as Johnstone, (2003); Abebayehu, (2004); Ishengoma, (2004); Milena & Sonja, (2008); and Damtew, (2014) that financing the higher education sub-sector is becoming a daunting challenge elsewhere in the world. Therefore, searching for different funding sources and financing mechanisms is mandatory in order to improve quality, expand access, ensure equity, promote efficiency and relevance of higher education.

The situation in Ethiopian higher education is not different when it comes to the funding issue. According to the reports of the Ministry of Education (MoE, 2003, 2012), the major challenges surrounding the Ethiopian higher

education are: low access, declining quality, inefficient system, and inequitable access to higher education; not to mention the lack of experienced academic staff, unremitting brain drain, and other bottlenecks of the sub-sector. Most of these challenges are mainly boils down to the lack of adequate finance; which for a long period of time, was shouldered exclusively by government. Cognizant of these and other challenges, the government of Ethiopia introduced a cost sharing policy in public University in 2003 whereby the students are to share certain percentage of their higher education cost and repay it after graduation.

The cost sharing policy is supposed to contribute to attain the core objectives of higher education particularly in terms of providing equitable higher education. However, personal observation of the researcher, serious grievances from the beneficiaries as well as the findings of different researches such as Teshome (2007), Emnet (2008), Ababayehu (2012), Tebeje (2012), Wanna & Desalegn (2012), and Sewale (2014) revealed that there are certain gaps in the policy itself, in its implementation (practice), and in research conducted on the policy. So, the current study examined these gaps and provided feasible recommendations to address them.

Policy gaps: the existing deferred model of the Ethiopian cost sharing policy whereby the graduates are required to repay the share after graduation is encouraging default on the scheme and negatively affecting the financial return from the scheme as discussed by Emnet (2008), and Ababayehu (2012). Therefore, the appropriateness of the current deferred repayment model for realizing the basic assumptions of the policy needs to be investigated in terms of social, economic and technological development of the nation. Moreover, the policy as well as the directives prepared for its implementation says nothing about the repayment in the case of graduates' unemployment.

Besides its financial implication, there are concerns as to how the policy addresses different social and academic challenges. For instance, in terms of promoting equity the policy has very narrow perspective; focuses on equity at access level only, while ignoring equity at process and outcome levels. The policy also encounter conceptual fallacy by mixing up the controversial concept of 'income contingent' and 'graduate tax' repayment models which entail different meaning and potentially create confusions, encourages irregularities, and ultimately jeopardize equity, as argued by Johnstone (2004) and Chapman (2007). Therefore, this study attempted to examine such policy gaps

in light of the existing social, economic and political context and suggested the possible way out.

Practice Gaps: Concerning the gaps in the implementation of the policy researches done by Ababayehu (2004) and Wanna & Desalegn (2012) indicated that there are pitfalls and irregularities in relation to the implementing organs. The practice gaps are criticized for eroding equity, which the policy vehemently claims to redress. Moreover, there are wide spread irregularities in the way Universities treat their staff members who proceed further education under their sponsorship, in relation to cost sharing. So, such practice gaps, besides policy gaps, triggered this study.

Research gaps: In addition to the gaps in policy & practice, there are also gaps in the researchers conducted so far on Ethiopian cost sharing policy. In the first place, most of the studies conducted on the policy were done in the early period of the policy, for instance; Shimelis (2004); Girmaw (2007), Ashebir (2007), Teshome (2005, 2007), and Emnet, (2008). By then the success, contribution and challenges of the policy could not be vividly seen. As a result, little has been known as to how and how far the scheme has contributed to promote equity in Higher education. So, the need for timely scrutiny on the policy is clearly visible. By the time the current study is conducted, the policy is already about thirteen years. Therefore, it is possible to comfortably study its success, contribution, practice and challenges without being scared about prematurity of the scrutiny.

Concerning the conceptual gaps in the previous researches, the limited previous studies done on the contribution of cost sharing to equity focused only on the contribution of the scheme to equity at access level. This study however, attempted to include the influence of the policy on equity at process as well as outcome levels of higher education, in addition to its contribution to equity at access level.

In terms of methodology, some of the previous studies done on the policy, for instance by Sewale, (2013); Tebeje, (2012); and Kibrom, (2015) were conducted using purely qualitative approach and thus lacked the benefits of quantitative approach. Likewise, some of them, for instance Ababayehu and Johnstone, (2004), and Teshome (2007), used predominantly secondary data (documents) and thus lacked the benefits of primary data. And yet, some others like Abdena, (2005); Teshome, (2007); Wanna & Desalegn, (2012) mainly dealt with the implementation problems and perception of the beneficiaries towards the policy and didn't touch the implications of the policy for equity. Therefore, this study attempted to bridge these gaps.

1.3. Operational Definition of Key Terms

Equity: in this study equity refers to having a system with equitable “access to, participation in, and outcomes of higher education” (OECD, 2008:14).

Thus, equity in this case considers the implication of the policy for equity both *before* graduation as well as *after* graduation. Equity before graduation considered the ‘*access*’ and ‘*process*’ level equity and was measured in terms of the contribution of the scheme in the effort to expand HEIs and thus in *creating access* for deserving students. Likewise, at process level, the contribution of the scheme for *students’ treatment* in the Universities (specifically in terms of differential academic support for the previously disadvantages and needy students since they share the cost) and in terms of influence of the policy on students’ *choice of field of study-since some fields are more costly than others*. Finally, outcome level equity focused on equity *after* graduation and it was measured in terms of carryover effect of the cost sharing policy on graduates’ *further education, and job mobility*.

1.4. Basic Questions

The study attempts to address the following basic questions.

1. How does the cost sharing policy influence equity among public University students?
 - 1.1. Is there significant difference in the responses of students concerning the influence of cost sharing policy on equity in Universities; by their sex, faculty, residence and economic status?
2. How does the cost sharing policy influence equity among employees as experienced by graduate beneficiaries?

1.5. Conceptual Model

The introduction of the cost sharing policy in Ethiopia’s HE was supposed to be influenced by global, national, and institutional forces, all considered as inputs, (Chapman, 2005; Tebeje, 2012). The three forces share some boundary; where the ovals overlap on the diagram above. That indicates there are some common concerns/interests among the global, national and institutional forces that triggered the introduction of the cost sharing policy while there are still some specific interests for each. For instance, researches indicated that financial constraint is a common

factor/justification that leads to the introduction of cost sharing at all the three levels; global, national, institutional.

Similarly, the outputs also overlap to indicate that any education policy intends to attain these core values but the priority for each as well as the degree of attainment of these outputs varies. In short, equity, quality and efficiency are not mutually exclusive variables in education; no variable is left untouched in an effort to attain any one of the three.

1.6. General Objective

This research was initiated with the general objective of investigating the implication of the Ethiopian public universities cost sharing policy for equity.

1.6.1. Specific Objectives

1. To examine the cost sharing model being used in Ethiopian public Universities and its appropriateness to achieve equity.
2. To investigate the influence of cost sharing policy on equity for University students.
3. To assess the implication of cost sharing policy among graduate beneficiaries.

1.7. Scope of the Study

In terms of coverage, this study considered four public Universities, Ministry of Education, Ethiopian Revenue and Customs Authority (ERCA), and five employer organizations. All organizations were selected because they are the frontline designers and implementers of the policy. Furthermore, the research was delimited to the first generation Universities (those established before 2000 GC) because they have long years of experience in implementing the policy. Moreover, they are supposed to have adequate information and knowledge about the policy from the inception to its current status. Besides, this study was confined only to public Universities and didn’t include private higher education institutions.

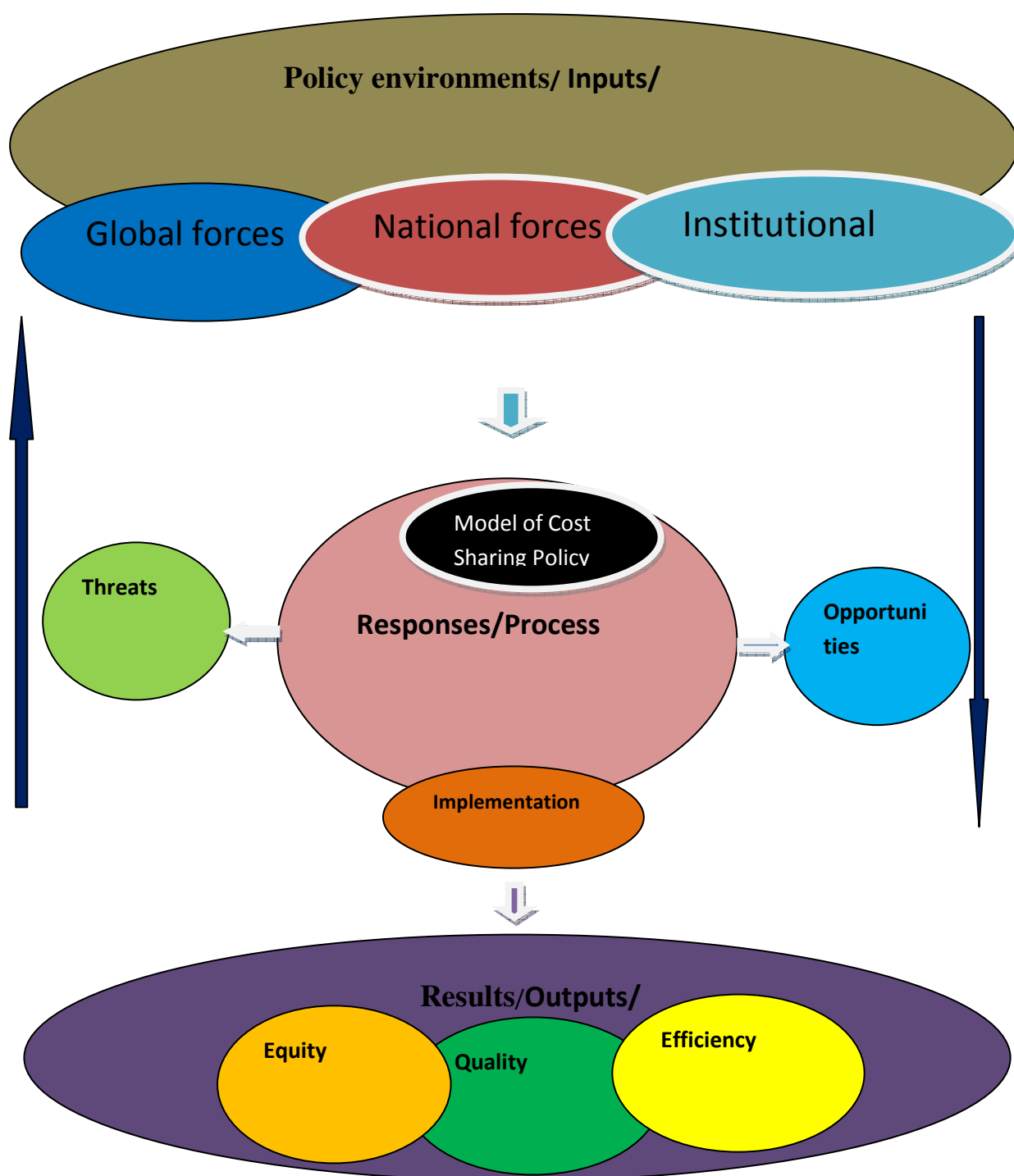
In terms of the conceptual delimitation, though there are various finance driven reforms in higher education such as expenditure reform, revenue diversification reform, financing reforms etc, this study focuses only on cost sharing as one of finance driven reforms.

1.8. Limitations of the Study

One of the major limitations encountered during the process of the research was that some of the key informant interviewees were not willing to be tape recorded and I

resorted to taking only note which may affect the precision

of some of the quotations.



Moreover, the classification of families' economic level used in this study was based on the classification of income tax authority designed for urban dwellers and may not properly represent the category for rural parents. Besides, due to the weak documentation system I couldn't get

comprehensive and complete data regarding the number of cost sharing beneficiaries and the amount collected since its introduction. For instance, I tried to get the total number of graduates eligible for cost sharing and the amount of the money collected since then from official documents but I

managed to get only the number of graduates while there is no properly organized corresponding data regarding the amount collected from cost sharing for the years before 2011.

II. COST SHARING AND EQUITY IN HIGHER EDUCATION INSTITUTIONS

Ensuring equity is one of the rationales for the introduction of higher education cost sharing in many countries (Johnstone, 1998, 2003). From equity point of view, proponents of cost sharing like Chapman (2002) and Barr (2010), argue that fully subsidized higher education has a regressive effect on equity in that it serves the purpose of redistributing the income from the poor to the wealthy segment of the population. Consequently, the effect of cost sharing on equity is a point of hot debate among the scholars concerned with the financing of higher education. Accordingly, scholars such as Johnstone (2003), Espinoza (2007), Milena & Sonja (2008), Barr (2010), Tebeje (2012), and Wang (2013) tried to investigate the influence of neoliberal socioeconomic policy in general and cost sharing policy in particular on equity in higher education and they found that cost sharing could have either progressive or regressive effect on equity in higher education depending on the socioeconomic context of nations.

It should however be noted that in almost all of these and other studies dealing with the relationship between cost sharing and equity, getting access to higher education was considered as the only indicator of equity. However, equity is not ensured merely by creating opportunity for students with diverse socio-economic background to get the opportunity to enrol in higher education. Teshome (2005, 2007), and Emnet (2008) justify that the revenue collected from the graduates of higher education under the cost sharing scheme is used to expand higher education institutions so as to enrol every disserving student.

In addition to equitable access, another indicator of equity in relation to cost sharing is the implication of the scheme on the students' choice of field of study. Penros (1998) maintains that cost sharing presumably affects students from diverse socioeconomic background in their choice of field of study. This means, since all programs are not equally costly, students, especially those from poor family background, might be forced to choose less costly fields even if the field is not of their interest. On the other hand, students from affluent families could choose the field of their interest regardless of the cost attached to it because they may not bother about the repayment (Penros (1998). Similarly, Yasin (2010) in his study about the influence of

higher education fee on equity in Sudan discussed that the existence of fee in higher education influences students' decision regarding the selection of Universities and colleges to attend, and the field of study. Likewise, a study by European Commission (2014) indicated that cost sharing creates inequity among University students in that it inhibits students from poor family not to attend programs of their interest either because they could not accumulate enough money to repay the share or they could not see the long-term value of the programme owing to the high cost associated with it.

Contrary to this, a study by centre for higher education policy studies at the University of Twente, The Netherlands (2008), indicated that though cost sharing exists the students' choice of field of study remains to be irresponsive to it. That means, even though students from low economic family background are supposed to choose less costly fields the students' departmental choice is not affected by the existence of cost sharing. So, this study is expected to unveil what the situation seems in Ethiopian context.

So, the arguments regarding the equity implication of cost sharing could be summarized in to two opposing sides. The first ones are those which put that cost sharing promotes equity at access level by increasing opportunity of enrolment for deserving students. Contrary to this arguments are those which maintain that cost sharing has negative effect on equity at process level by impacting on the students' choice of field of study.

Some advocates of the conflict theory also argue that reforms such as cost sharing serves the purpose of systematic exclusion of the poor from "important" fields because of what is called 'liquidity constraint'. Various meta-analysis and empirical studies come up with even more frustrating finding that indicate cost sharing, particularly in the absence of loan system, prohibit students from low income families not to enrol in University education at all (Leslie & Brinkman, 1997; McPherson, Schapiro and Winston, 1993; Heller, 1999; Vossensteyn, 2005 (cited in European Commission, 2014). The study confirms that the deterrent impact of cost sharing on enrolment behaviour of low income students is twice as strong as students' loan.

Another indicator of equity at process level of University education in relation to cost sharing is *differential treatment of students* (ADB, 2009). This implies that after getting opportunity of access to higher education, students with disadvantaged background in Universities should receive differential academic support so as to up-lift them to the

level of already privileged ones and thus ensure the survival of all students in the system. This is because equity is not just about everybody getting the same treatment but about everybody receiving differential treatment according to their need so as to help the previously disadvantaged ones and lift them up to the same level with the already privileged ones (UNESCO, 2010). This implies that, since students from poor family background and those from remote rural areas might not get the same quality education like the ones from affluent families and urban areas while they were in primary and secondary schools, the former ones should get special attention and should be given additional academic support so that they can catch up with the previously advantaged group.

By the same line of argument, a comprehensive study by Asian Development Bank (ADB, 2009) on the cost sharing policy and practices of developing Asian and Pacific countries also attested that although most of the countries reiterated ensuring equity as one of the justifications for the introduction of the policy, the practice indicted that equity is predominantly treated from the perspective of creating access while equity during the process, or after access, is mostly overlooked.

Creating access is necessary but not sufficient condition to ensure equity because, after getting the access, all students could not equally compete and succeed owing to wider gap in their background. Thus, equity at process and at outcome levels should also be considered, as argued by UNESCO, (2012). Therefore, since the policy claims to ensure equity, the disadvantaged group should receive certain type of differential academic support if real equity is to be ensured. This is therefore one of the issues this study investigated. Another important but inadequately studied aspect in relation to cost sharing and equity is the implication of the policy for equity in terms of further education and graduates' mobility. Thus, equity among individuals after obtaining their first degree and the implication of cost sharing on pursuing further education and mobility is investigated by this study.

III. THE RESEARCH METHOD

This research was guided by the epistemological philosophy of pragmatic knowledge base. As Creswell (2012) discussed, if the nature of the problem is studied using mixed method, it implies that the study is informed by the pragmatic view of the epistemological debate. Regarding the sequence and weight of the qualitative and quantitative methods to be used, the research is of concurrent QUAL-Quan type whereby both qualitative and quantitative data

are collected simultaneously but with more emphasis for the qualitative aspect. As of the specific mixed design, the study employed the *Embedded/nested design of the mixed methodology* whereby most of the information is obtained using qualitative approach while the quantitative data is embedded and plays a supportive role.

3.1. Samples and Sampling Techniques

This study utilized both primary and secondary data. Accordingly, primary data were collected from four sample public Universities' management and students, Authority and expert from the Ministry of Education, Ethiopian Revenue and Customs Authority (ERCA), former University graduates as well as managers of employer organizations namely the Ethiopian Revenue and Customs' Authority and Entoto Amba Secondary School from government organizations and Save the children, Pact and Goal-Ethiopia from non-governmental employers. Besides, secondary data were obtained from pertinent documents such as the 1994 Education and Training Policy of Ethiopia, the cost sharing policy document (FDRE, 154/2008), the MoE directive No. 001/2012, the ERCA directive No. 71/2012, the Higher Education Proclamation No. 650/2009), Education Sector Development Programs (ESDP I, II, III, IV, and V), the World Bank and IMF Documents, MoE documents, as well as the profiles of selected post graduate students.

Ethiopian Universities are classified in to three strata of generation based on their age or period of establishment. Accordingly, the established stratum is used in the selection of sample Universities for this research. Thus, only the first-generation Universities were selected using stratified purposive sampling with the assumption that they have adequate experience and ample information regarding the cost sharing policy because they have been implementing it from its inception to present. Therefore, four (50%) of the eight first generation Universities were selected using simple random sampling. Accordingly, Jimma University, Hawassa University, Bahir Dar University and Addis Ababa University were sampled for the study. Then, the faculties, departments and students in each University were selected using multi-stage sampling.

Following the selection of Universities, two faculties/colleges from each University were selected using extreme case purposive sampling; whereby two extreme colleges were selected on the basis of the amount students are required to share; one from more expensive faculty/college (specifically Engineering for which the average tuition fee is about 23.61 birr per credit hour) and

one from inexpensive faculty/college, specifically social sciences for which the average tuition fee is about 9.58 birr per credit hour (MoE, 2008). The food and accommodation fee are the same for every student in all the colleges and Universities. Thus, a total of 8, (2 faculties from each of the 4 universities) were selected from a population of 42 faculties/colleges found in the four sample Universities. Note that similar faculties/colleges in different Universities were considered as one. Next, two departments from each faculty/college (a total of four departments from each University) which makes 16 departments from all sample Universities, were selected using simple random sampling.

Concerning the selection of undergraduate students, a total of 380, senior students were selected from a population of 46,560 senior regular undergraduate students found in the sample Universities in 2016. The sample size was determined using Cohen, Manion & Morison (2007) framework of sample size determination which proposes a sample size of 383 respondents to be sufficient for a population of up to 100,000 at 0.05 confidence level. Accordingly, 95 students (47 and/or 48 from each faculty and 24 and/or 23 students from each department) were randomly selected from the four departments under the two faculties/colleges in each University to fill the questionnaire pertaining to the implication of cost sharing for equity, quality and efficiency in their respective institution. In terms of sex, 248 males and 132 female students were selected to fill the questionnaire. The number of male and female students was determined using proportional sampling at each university.

Finally, Eight (8) former graduate employees from each of the five employer organization, who graduated (earned at least their first degree) after the introduction of cost sharing policy, were selected through stratified random sampling and participated in Focus Group Discussion. The FGDs were designed to elicit information from graduate particularly pertaining to the equity implication of cost sharing on individuals in terms of further education and job mobility. The implication of cost sharing to equity was treated at three different levels in this study; at access level (for expansion of higher education and hence enrolment opportunity), at process level (for choice of field of study and differential academic support) and at outcome level (for further education and graduates mobility). Data for the first level were collected from documents and interviews, for the second level from students and interviews and for the third level from graduates using FGDs.

3.2. Data Gathering Tools

In this study, semi-structured interviews and Focus Group Discussions guides were used to collect qualitative data from officials, experts and employees while questionnaire was used to gather quantitative data from University students. The questionnaire contains 12 items designed in the form of five point likert scale and organized under the two indicators. Pilot testing was also conducted on 60 students from Bahirdar University and the reliability of the items was checked using Cronbach Alpha and found to be $r = 0.86$ which suggests that the questionnaire is adequately reliable. Likewise, the content validity index (CVI) of the questionnaire was checked using Lawshe's 1975 model and found to be CVI= 0.82 which suggests that the items are valid to collect the desired information.

3.3. Data Analysis Tools and Techniques

The tools used to analyse quantitative data were Mean, independent t-test and One-way ANOVA. Accordingly, Mean results were used to see the magnitude of the influence of cost sharing scheme on equity, quality and efficiency of public universities as rated by the students while t-test was used to analyse if the responses of the students regarding the implication of cost sharing on equity is significantly different by their sex (for males Vs females), faculty (technology Vs social sciences), and residence (rural Vs urban origin). Similarly, One-Way ANOVA was utilized to analyse if there is significant difference in the responses of the students from the three economic status (low, middle and high income) concerning the implication of the cost sharing policy for the three variables; equity, quality and efficiency.

To analyse the influence of the policy on students from different socio-economic background (in terms of equity) it is inevitable that the economic background of the students and/or of their parents need to be classified as low, middle and high. In this regard however, since there is no standard classification of individuals by the level of their economic status in Ethiopia, I used the classification set by the Ethiopian Tax Authority for the purpose of income tax collection. Accordingly, the category is as follows: Monthly income of birr 500 to 3000 was considered low income, from birr 3001 to 8000 was considered middle income, and above 8000 birr monthly income was considered high income (ERCA, 2015). So, this classification was used to determine the parents' and/or students' economic status and hence in the analysis of equity implication of cost sharing for students from different economic background.

Moreover, thematic analysis organized along the major variables of the study was also used for the qualitative part.

IV. RESULTS AND DISCUSSION

This section briefly presents about the major findings of the study, conclusion and recommendations.

4.1. Respondents' Characteristics

The questionnaires were distributed to 380 students but 69 of them were discarded as the required information was not fully given and thus could not be used for analysis. Therefore, 311 questionnaires were used for the analysis. Of the 311 respondents 217 were male while 94 were females, 205 were from urban origin while 106 were from rural origin, 151 of the respondents were from Technology faculty while 160 were from Social Science College. In terms of economic background, 64 respondents were from upper economic status, 115 from middle economic status and 132 from lower economic status.

4.2. Implication of the Policy for Equity at Access and Process Levels.

The implication of cost sharing policy for access, as an indicator of equity, is presented first and followed by the implication of the policy for equity at the process level of higher education.

4.2.1. Implication of the Policy for Equity at Access Level

According to OECD (2008), equity refers to having a system with equitable "access to, participation in, and outcomes of higher education based only on the individual's innate ability and study effort" (OECD, 2008:14). It is obvious that admission to higher education elsewhere requires better academic achievement/performance/ on national examination. In Ethiopia as well, attaining the minimum cut-off point on the national examination leads to University admission. However, the cut-off point itself is, to a large extent, contingent upon the space available in the Universities. That means, the cut-off point is determined depending on the space available in the higher education institutions and the number of students they can accommodate; because the cut-off point is norm referenced in Ethiopian case. This further implies that if adequate space is available in Universities, large number of deserving students can get the opportunity to join Universities. Otherwise, only few students who got quality education at primary and/or secondary levels, and likely to achieve better on national exams, will join Universities. Therefore, cost sharing is supposed to generate revenue and support the

expansion of Universities and increase opportunity of access. An informant from MoE has affirmed this;

Cost sharing was introduced with the intension of recovering a portion of government's expenses on University education which in turn is expected to back-up the effort of widening higher education access. We know that the minimum amount students are required to share, coupled with weak implementation, could not bear significant financial support. Thus, we are planning to increase the tuition fee from 15% to 20% in the second Growth and Transformation Plan (GTP II).

As indicated above, free higher education leads to very limited space in Universities, especially in developing countries where various competing needs beg attention of the government. This is because, as maintained by Saint, (2010) the government cannot afford all the running and expansion costs of higher education and other social sectors. The implication of limited space in University for equity is that only the already privileged children of the rich occupy the limited space in Universities while the poor remains alienated from higher education (Teshome, 2007).

Thus, the best solution to improve opportunity of access to higher education for every deserving student is expanding or building more Universities. Building additional Universities on the other hand, as Johnstone, (2003) attested, is very costly endeavour which government alone cannot afford unless supported by private funding in the form of various cost recovery mechanisms. At this junction, one can clearly see the need for various cost recovery methods such as cost sharing, in supporting the government's effort of expanding higher education institutions and hence maximizing the opportunity of access to higher education for every deserving student. Such contribution of the scheme ultimately supports the effort to create equitable higher education system. Therefore, in order to see the contribution of the scheme for this comprehensive national agenda, it is imperative to examine the financial significance of the revenue generated via cost sharing and its contribution in the massive effort of expanding higher education institutions.

The data obtained from the Ministry of Finance and Economic Cooperation (MoFEC ,2016) and Ministry of Education (MoE, 2016) indicate that so far the scheme contributed very insignificant portion to the total recurrent budget allocated for existing Universities as well as for the construction of new ones. For instance, the reports indicated that the revenue generated from cost sharing accounted only

1.71% of the total recurrent budget allocated for public Universities in 2013, 1.31% in 2014 and only 1.18% in 2015. The report also revealed that the money collected via the scheme contributes less than 1% of the universities expansion costs in those years. Thus, it could be seen from these figures that the contribution of the cost sharing scheme to the effort of ensuring wide access to higher education for every deserving students is very minimum. The main reasons for such invisible contribution of the scheme are the weak implementation system and coordination among the major implementing organs, the application of deferred model for every student including those who afford up-front payment. Abebayehu, (2004); Teshome, (2007), and Emnet, (2008) also confirmed that the poor implementation of the policy and the absence of means-testing made the revenue generated from the scheme exceedingly insignificant. Consequently, the contribution of the scheme to the

expansion of and access to higher education remains invisible.

Similarly, Wanna & Desalegn (2012) and Damtew, (2015) indicated that the poor management and collection system make the contribution of the scheme invisible in the massive effort of higher education institutions expansion. The main reason for the poor management of the scheme, in many developing countries who follow the deferred repayment model, as discussed by Johnstone, (2004) was the inappropriateness of the model in context where strong taxation and documentation system is lacking. The same problem is being observed in Ethiopia. As a result, it was learnt that the financial contribution of cost sharing has fallen short of supporting the effort of widening higher education access as well as ensuring equity in HEIs.

The following graphs indicate how insignificant the financial gain from the scheme is.

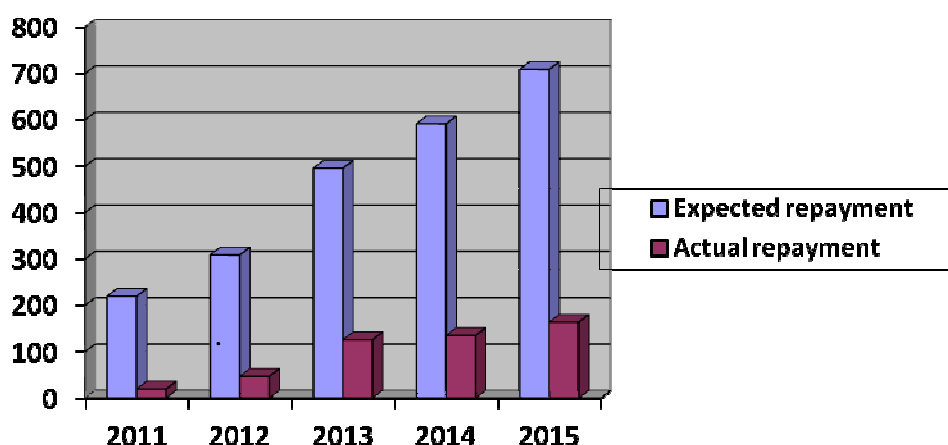
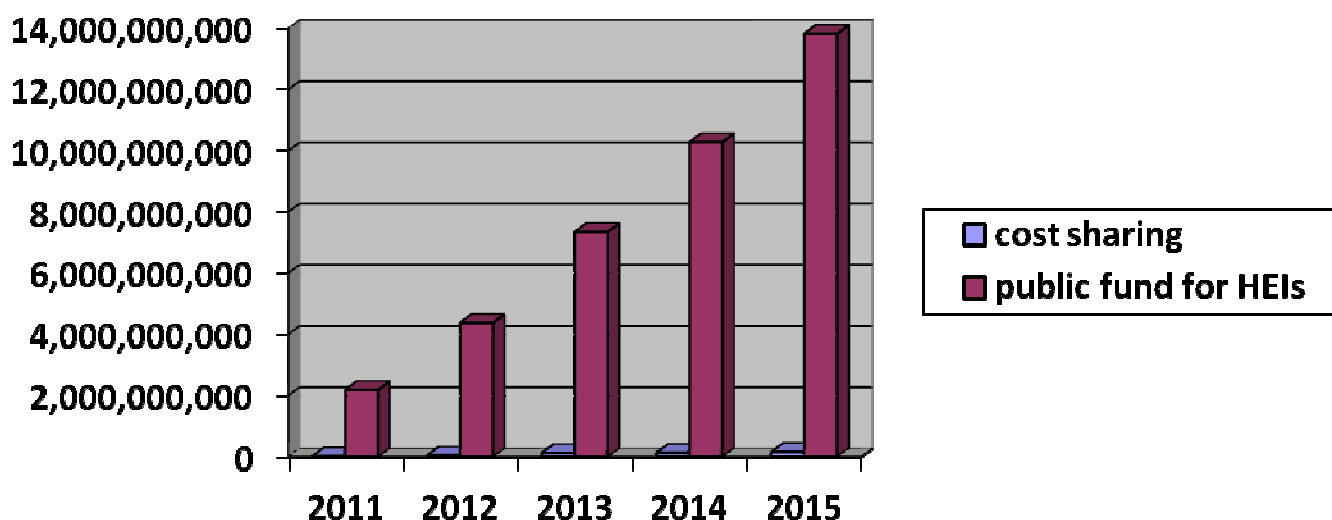


Figure 1: Comparison of the expected and actual repayment of cost sharing (in Millions Birr)

From the above graph it is clearly seen that the amount actually collected from cost sharing is by far below the amount expected to be collected. Such wide discrepancy

between the two is mainly due to the design and implementation challenges of the cost sharing scheme.



Source: MoFEC, 2016

Figure 2: Comparison of the revenue generated through cost sharing and the annual budget allocated for HEIs (2011 to 2015).

Notwithstanding the limited contribution of the scheme to improving access and the resulting equity, emphasising only access as a sole means of ensuring equity is conceptually problematic itself. It has been indicated that the dominant approach through which the government tries to redress the problem of equity in HE is by expanding access and providing wider opportunity for entry. It is common to read from different official reports that equity is ensured in Universities simply because many female students, students from emerging regions and minorities got the opportunity to join Universities. For instance, documents such as the Education and Training Policy, the Education Sector Development Program (ESDP), the Higher Education Proclamation, the first and second Growth and Transformation Plans (GTP I & II) all discussed how to address equity in higher education at entry level and says nothing or very little about how to address equity at process and outcome levels.

For instance, the narratives of the strategic plans of the MoE about ensuring gender equity in HEIs says; "...the Ministry sees the gender disparity in higher education as major concern and will make concerted effort to address it", (MoE, 2004: 27). This indicates that equity is represented only by numbers. However, it should be known that such numerical representation of the issue is just a starting point. If equity in its entire dimension is to be promoted, various supports should be given to the disadvantages groups at process as well as outcome levels too. In conclusion, concerning the contribution of cost sharing to equity at access level, different document as well as data obtained

from informants revealed that the scheme is contributing very little to the expansion of public Universities and to the resulting equity in HEIs due to weak implementation of the policy.

4.2.2. Implication of the Policy for Equity at Process Level

As discussed above, the problem of equity in Ethiopian HE is more than just lack of equitable access. Scholars such as Pschrapulous, (1998); Sellar & Gale, (2011); Gale & Tranter, (2011) strongly argue that equity need to be seen in light of 'process' as well as 'outcome', in addition to 'access'.

By examining how equity problems are conceived and approached in Ethiopian context, Tebeje (2012: 11) noted that;

The attempt of the government to address the problem of equity in HE only in terms of creating equitable access for students is just 'superficial representation of the problem' because equity is not only about access. Trying to represent equity only in number, as lack of enrolment opportunity, can obscure less measurable injustice in HE system.

The argument maintains that equity should entails justice in the process of service delivery (the teaching-learning process in this case) as well as at outcome level in the form of providing fairly comparable opportunities of any kind related to and resulting from one's higher education

regardless of his/her background. The equity of outcome helps the graduates to equally compete in the market.

Reviews of different documents and research findings revealed that the contribution of cost sharing to equity at 'process' and 'outcome' level is the most under researched area in our context. Therefore, in this study equity at process level was measured through the responses of the students regarding the influence of the scheme on *differential academic support for needy students* in Universities as well as its influence on students' *choice of field of study*,

Likewise, equity at outcome level was measured using the influence of the policy on graduates' *further education* and *job mobility*. Accordingly, independent t-test was used to see if the responses of students by sex, faculty, urban-rural origin and by level of economic status is different concerning the influence of the policy on equity at process level. The following table presents the statistical results of the responses of students across the four units of analysis pertaining to the influence of the cost sharing policy on their choice of field of study and the way they are treated in their respective university.

Table 4.2: t-test result for the students' response about the influence of cost sharing on equity

Independent variables	N=311	Dependent variables	Mean	SD	t	P-value
Sex	Males	Treatment	23.5	5.4	1.10	0.74
		Choice of field of study	11.1	3.9		
	Females	Treatment	22.8	5.8	0.64	0.43
		Choice of field of study	10.8	3.6		
Faculty	Technology	Treatment	23.5	5.3	0.57	0.16
		Choice of field of study	10.5	3.7		
	Social sciences	Treatment	23.2	5.8	-1.83	0.64
		Choice of field of study	11.4	3.9		
Residence	Urban	Treatment	23.0	5.36	-1.40	0.69
		Choice of field of study	10.9	3.8		
	Rural	Treatment	23.9	5.9	-.26	0.53
		Choice of field of study	11.1	4.0		

Table 4.2 indicate the analysis of the responses of students by their sex, faculty and residence concerning the influence of cost sharing on equity in Universities in terms of the two indicators. Accordingly, all the means in the table suggest that the influence of the scheme on students' choice of field of study as well as differential academic support is low. Besides, the t-test results; $[t(309) = 1.10, p = 0.74]$, $p \leq 0.05$ for male students and $[t(309) = 0.64, p = 0.43]$, $p \leq 0.05$ for female students, also indicate that there is no significant difference in the responses of the students by their sex regarding the impact of cost sharing on equity in Universities. Penrose (1998), Yasin (2010) and European

Commission (2010) as well as Abdena (2005) argues that cost sharing makes students more cautious in selecting their field of study as well as to complete their studies within the given time. Therefore, the result of the current study is contrary to the arguments of these scholars. This could be either due to the methodology and sampling differences between the current study and that of Abdena or due to timing since Abdena's study was done in the early period of the policy.

The finding of this study however is in line with the study conducted by centre for higher education policy studies at the University of Twente, (2008), which indicated

that even though cost sharing exists the students' choice of field of study remains to be irresponsive to it in most countries for different reasons such as poor administration of the scheme and/or the minimum amount the students are required to share. In Ethiopian context the possible reason the students' decision of field of study remains un-affected by cost sharing could be explained by the nature of the deferred repayment model and weakness in the implementation of the policy where students easily default on the scheme.

Similarly, the responses of students enrolled in relatively costly faculty (technology) and relatively inexpensive faculty (social science) is computed in the above table and the means for the two faculties; 10.5 and 11.4 respectively, suggested that the choice of their current field of study was not influenced by the existence of the scheme. Likewise, the means of 23.5 and 23.2 for Technology and Social Sciences College respectively implies that the existence of the scheme does not help students to receive any differential academic support in their Universities. The t-test results; $[t(309) = 0.57, p = 0.16], p \leq 0.05$ for students from Technology faculties and $[t(309) = -1.83, p = 0.64], p \leq 0.05$ for those from Social Sciences Colleges also indicated that there is no significant difference in the responses of students from both faculties regarding the contribution of the scheme to equity. That is, both groups agree that the scheme does not significantly influence equity at process level.

A study conducted by Johnstone, (2008) on the influence of cost sharing on students' enrolment in the Netherlands HE maintains that although the introduction of cost sharing was expected to have led to changes in student enrolment behavior, for example in terms of lower participation, the choice of cheaper (shorter) or easier programs, or better study progress no such influences were observed. So, the findings of the current study regarding this issue also support that of Johnstone's findings.

Finally, the responses of students from urban and rural background were computed and the means suggest that the scheme didn't affect their departmental choice as well as differential treatments in the form of academic support, regardless of their origin. The t-test results $[t(309) = -1.40, p = 0.69], p \leq 0.05$ for students from urban origin and $[t(309) = -.26, p = 0.53], p \leq 0.05$ for those from rural background indicate that there is no significant difference in their responses regarding the influence of cost sharing on equity. A study by Yang (2013) indicated that since urban students are privileged in receiving better quality education at all levels as compared to rural students the later group should get the privilege of receiving various academic support in Universities in order to ensure equity. The result of this study however implies that the existence of cost sharing does not help students from rural background to get any differential academic support to ensure equity.

Table 4.3: ANOVA result for the responses of students about the influence of cost sharing on equity

Economic status	Indicators of equity	Mean	SD	F	P
Lower	Treatment	18.5	12.4	0.94	0.19
	Choice of field of study	19.6	16.1		
Middle	Treatment	20.5	14.3	0.41	0.37
	Choice of field of study	18.4	14.9		
Upper	Treatment	21.3	15.1	0.45	0.63
	Choice of field of study	19.0	13.9		

The mean values in the above table shows if the existence of cost sharing influence the treatment of students and departmental choices of students from the three economic statuses. Besides, the ANOVA results (P-values)

indicate if there is statistically significant difference in the responses of students from the three economic statuses regarding the influence of cost sharing on their choice of field of study and differential academic support in their

Universities. Accordingly, all the means suggest that the influence of cost sharing on students' departmental choice as well as treatment is very low regardless of their economic status. Likewise, the ANOVA results; $[F(309) = 0.94, p = 0.20]$, $p \leq 0.05$ for students from lower economic status, $[F(309) = 0.41, p = 0.37]$, $p \leq 0.05$ for students from middle economic status, and $[F(309) = 0.45, p = 0.63]$, $p \leq 0.05$ for students from upper economic status, indicated that there is no significant difference in their responses concerning the influence of cost sharing on their choice of field of study and the treatment they receive in their respective Universities.

The above quantitative analysis was substantiated by the qualitative information obtained from sample University authorities which indicate that most students do not consider cost sharing at all when they decide the field of study they should choose. Likewise, the results revealed that Universities do not have the tendency to consider the existence of cost sharing and provide the needy students any differential academic support because the institutions do not benefit anything from the scheme directly.

In general, tables 4.2 and 4.3 above indicate the responses of students regarding the influence of cost sharing on equity in terms of the two indicators; differential treatment and choice of field of study. The analyses indicated that the policy does not affect both treatment and choice of field of study. Therefore, it could be concluded that both the institutions and the students remain irresponsive to the cost sharing scheme. This means, the institutions (Universities) do not provide visible differential treatment to students with different background even if they are required to share the cost of their education and similarly students do not consider the variations in the cost associated to different fields of study in deciding what field to study.

The reason for the students to be irresponsive to cost sharing could be justified in two ways. The amount they share is not that high to influence their decision and the mode of payment; the fact that they are not required to make up-front payment. In fact, Up-front payment has its own merits and demerits. It is preferred from economic point of view as it enables to collect the money from the students' right at the beginning. It is disadvantageous, however, in that it prohibits those from lower socioeconomic background not to proceed their higher education and exasperate inequity. Similarly, the reason for the institutions/Universities/ to remain irresponsive to the scheme, as affirmed by informants during interviews, is that they do not directly benefit anything from the scheme.

In sum, although the cost sharing policy is supposed to improve equity in higher education by promoting differential academic support in the process of education, the analysis of the data revealed that the scheme has not improved equity in this regard. That is, it doesn't bring about any differential academic support/treatment/ for the needy students in the universities and hence maintains the existing inequity through equal treatment. On the other hand, the findings indicated that the scheme has not brought about any unintended result of causing inequity by affecting students' decision of field of study because the students' choice of field of study was found price inelastic. In this regard, the scheme has not brought about inequity. Generally, the cost sharing policy, in terms of the two indicators of equity, has neither promoted equity nor brought about inequity; it remains unrelated to equity

4.3. Equity after Graduation

This section presents the implication of the cost sharing scheme for equity at outcome level; for graduates' further education and job mobility.

4.3.1. Implication for Further Education

The information for this dimension of equity was obtained, to a large extent, from graduate employees working in sample government and non-government organizations using focus group discussion and to some extent from officials via interviews. The main focus of this sub-section is to examine the implication of the cost sharing scheme on further education and job mobility of University graduates from equity perspective. The information obtained through focus group discussion from graduate beneficiaries generally revealed that the cost sharing policy is adversely affecting equity by impeding further education and employees' mobility.

One NGO employee (male), with Master degree in social work, in the FGD said that;

I got my first degree five years back and obtained my second degree two years ago. My parents decided to settle my cost sharing if I continue my second degree. Had it not been for my parents, my second degree would not have been realized. I made it because I was born to a middle-class family. By now, I am working for international NGO as program officer and my gross salary is 18,000 birr. Generally, I am living a relatively better life.

The information implied that the relatively better socioeconomic status of the informant enabled him to proceed his further education and ultimately supported him to lead a relatively better life. With this information in mind, it is imperative to see and juxtapose the response from a lady in another FGD so as to see the implication of cost sharing on individuals from equity perspective. She narrated;

I was born in a country side to a poor family. I got my first degree ten years back but couldn't continue my second degree because I can't settle my cost sharing. I do have two children and my current salary is five thousand birr and it is not enough even for house rent and other miscellaneous expenses, let alone deducting for the cost sharing. My husband is teaching in a private school with gross monthly salary of 4, 800 birr. We have to pay for the education of our kids and for the living. Worst of all, I afraid I may not get employed if I lose my current job for some reason because having second degree is becoming a mandatory to be employed due to the boom in the first degree graduates. I am even ashamed of visiting my parents in the countryside because they expect me to support them but I couldn't make it.

As opposed to the former informant, this lady fails to continue her second degree because of cost sharing and hence could not lead a relaxed life. Thus, one can see how the cost sharing is perpetuating the existing social inequity.

In a similar history, an FGD participant in one of the sample organizations who completed his first degree in History eleven years back and currently working in a local NGO explained that;

Last year my organization wanted to sponsor me for my Master's degree but avoided responsibility for my cost sharing. Then, when I went to University to get registered they told me to clear the cost sharing first. Therefore, since I couldn't pay the cost sharing, which by then was more than twenty-four thousand birr, I missed the opportunity.

The above response indicates that the individual could not proceed his further education due to cost sharing. The informant also said that he has not started the repayment for the last 11 years. This implies that there is lack of follow up of the repayment progress of graduates by the responsible organs such as MoE, ERCA and employers.

Similarly, a young lady in one of the sample organizations who recently completed her second degree under evening program but could not get her credential because she could not settle the cost sharing matters, emotionally explained that;

By the time I was registered for my Master's study no one, even the registrar office, raised about the cost sharing issue. Therefore, I continued my study under extension program and finalized my study. I paid more than 30,000 Birr, which I accumulated over the last five to six years, to complete my second degree. Finally however, the registrar office told me that I can't get any credential unless I complete the cost sharing payment, which was more than 20,000 birr. The credential would help me to apply for a better job but now I don't have any option than staying in the same organization with the previous salary scale until I make the repayment and get my credential.

Looking in to the responses of these individuals, through equity glass, one can see that the current practice of cost sharing is sustaining inequity among graduate beneficiaries, even without creating adequate financial support for the government. As the response indicated, some individuals manage to continue further education by virtue of their social/economic position and lead better life due to their better qualification while others remain trapped in the web of cost sharing and fail to do so.

To supplement the qualitative data, the profiles of some students engaged in regular post graduate programme in randomly selected departments at the sample Universities were also assessed and it was learnt that about 75% of them are government sponsored and the rest 25% are self-sponsored from well-paying NGOs or business owners who manage to settle their cost sharing to proceed further education. This implies that the cost sharing policy is perpetuating the existing social inequity; the haves have still the opportunity to continue their further education and hence earn better income and ultimately lead better life while the poor do not have such privilege/opportunity.

4.3.2. Implication for Graduates' Job Mobility

In addition to further education, the implication of cost sharing scheme for job mobility of employees from different social strata was considered as indicator of equity in this study. Accordingly, the FGDs held with employees in sample government organizations indicated that most graduates who entered in to contract to render service in lieu

of cost sharing payment do not have the opportunity to *search* for better paying jobs unless they finish their service time; which is equivalent to the time taken to finish their University education for first degree graduates. In fact, both the policy and the directive 001/2012 of the MoE put that if an individual who agreed to repay cost sharing by provide service, wants to stop providing the service he/she can pay the remaining amount in cash. However, the data obtained from the FGD indicated that some of the graduates do not have knowledge about this provision and yet others cannot afford the repayment in cash even if they have the awareness about this provision.

Therefore, it was revealed that the existence of the cost sharing policy seriously hampers the job mobility of individuals. That is, some graduates who do not have financial capacity do not have the opportunity to search for better jobs before they finish the obligation to render services *while* those who have the financial capability can clear the payment and compete for better paying jobs. One of the teachers, who graduated two years back and currently working in a government school, explained;

A year ago, I got the opportunity to join a better paying private school but when I asked the school in which I am working for clearance they asked me either to complete my service time or pay the remaining amount in cash. However, I couldn't pay that money because my salary is not enough even for my consumption and the only option I had was to stay until I finish my service time. So, I missed the opportunity.

There could be other graduates who might have similar experience such as this. Had this individual have the financial capacity, he could have paid and seized *that* opportunity. Therefore, even though not intentional, such systematic and tacit screening effect of the policy has a clear adverse impact on equity among beneficiaries.

Similarly, another FGD *discussant* in a sample school emotionally explained that;

Most of the employees who serve in government schools are old who approach retirement age and become 'comfortable' in the schools. Others however are young graduates who look for other alternatives but fail to do so because of cost sharing.

These evidences indicate the influence of cost sharing on individuals. The implication is not as simple as it might

appear; it is rather multifaceted. That means, it constrains individuals' job mobility and hence their income and personal development and their entire life, and ultimately perpetuates the existing inequity among individuals.

Saint (2004) and Teshome (2005) argue that the government intentionally gives teachers and health workers the option to pay the cost sharing through *service* delivery in order to minimize the serious turnover of employees in those sectors as well as to address the manpower shortage in hard-to-staff areas/community. True that such approach has considerable social advantage since it helps to partly resolve the shortage of skilled manpower in certain remote and hard-to-reach areas. At the same time however, it promotes inequity among graduates by deterring their job mobility. Besides, teachers and health workers are usually considered as 'exempted' from the cost sharing. However, in reality they are not exempted because they are required to give service to wherever the government deploy them for the duration equivalent to their university education, according to article 8(d) of the policy. So, the *haves*, within the graduates of medicine or teaching, can pay the share in cash and declare their freedom of searching for better jobs while the *have-nots* still suffer. Obviously, the poor have to pay huge opportunity cost.

The policy is also criticized for crippling the freedom of mobility of those who are sponsored by government for their MA or PhD studies, particularly in public Universities. The problem is further aggravated by the irregularities in the practices of different institution/universities in this regard. Article 8(1) of the directive No. 71/2012 of ERCA and article 6(4) of the directive 001/2012 of the MoE state that; "*Under-graduate students who want to settle cost sharing through service provision, need to give service equivalent to the duration of their University education if they want to pay the share by service*". However, the policy as well as the directives prepared for its implementation mentions nothing concerning the duration of service expected from post graduate students; the mandate is left to the sponsoring institutions. This therefore creates wider irregularities in the implementation of the policy.

For instance, some Universities require their employees to render two years service for one year post-graduate training (for both MA and PhD trainings) while others require one year service for one year training. Say, if a PhD study takes six years; which is common in most programs in Ethiopia, and if individuals are required to give two years services for one year training the employee is obliged to serve the sponsoring institution for 12 years; most

individuals approach their retirement age after that. On the other hand, those who are sponsored by those Universities that require one year service for one year training are supposed to serve the sponsoring institution for *only* six years for the six years training. Article 8(f) of the policy put that, if the graduate want to leave the sponsoring institution before finishing the expected service he/she should pay the remaining amount and 50% of the total cost as penalty; which is very huge amount and unaffordable by employees. This is clear evidence of the inconsistencies in the way the policy has been enforced.

Another prove of such inconsistencies is that, students sponsored by different institutions for further education are made to sign different amount of money as guarantee even though their salary is the same, the field of the study is the same, and the institution in which they *attend* their study is the same. For instance, PhD students, for a supposedly four to six years program, at Addis Ababa University in the field of Education Policy and Leadership sponsored by different Universities were treated differently in terms of cost sharing as shown below.

Universities	Cost for PhD study
Arbaminch University	700,000 birr
Bahirdar university	342,000 birr
Debrebrihan University	800,000 birr
Jigjiga University	400,000 birr
Mizan Tepi University	700,000 birr
Woldiya University	700,000 birr
Wollo University	600,000 birr

Sources, from the 2016 reports of each University

As indicated above *individuals* sponsored by different Universities are required to pay different amounts if they fail to render service after graduation. An informant from one of the sample Universities opined that the main reason for such discrepancies in the cost could be to minimize the staff turn-over particularly in newly established Universities. “*Most instructors want to leave the new Universities and join the established ones after they earn their post graduate degree unless tied by such mechanisms*” said the informant.

Therefore, notwithstanding its institutional and national advantage, the unsympathetic implication of such irregularities for individuals’ equity is clearly visible. Overall, the cost sharing policy in Ethiopian public Universities breeds injustice and unfair practices and ultimately creates inequity among employees by acting as a catalyst for the qualification gap between the rich and the

poor as well as by prohibiting freedom of job mobility of some graduates.

In fact, such instance is not unique to Ethiopia but also observed in most African countries where cost sharing is not based on means testing. For instance, after doing a meta-analysis regarding the influence of higher education cost sharing on equity in Kenya, Tanzania, and *Zambia*, Knight (2009) concluded that the policy resulted in social inequity by prohibiting the poor from further education. The findings of the current study also attested that the policy has brought the same consequence in Ethiopia as well.

Another controversial issue in relation to cost sharing is about the right of the individuals to get their diploma (credential) from the training institution. In principle, any person who successfully completes the academic requirements has the right to get official diploma from the training institution. The directive 001/2012 of MoE in its article 8(d) however state that;

“Any trainee who entered in to agreement with the sponsoring university to give service after training cannot get any official document from the training institution before finishing the service provision as per the agreement with the sponsoring institution”

As a result, the training institutions withhold the official diploma of individuals after they graduate until they settle the cost sharing issue; either *through* service provision or paying the outstanding cost in cash. A serious concern in this regard is how to reconcile the rights of the individual to get their official certificate and the right of the government to benefit from the graduates. As discussed by Atuahene, (2009) the experiences of different African countries suggest that the training institutions give the graduates their diploma and following up the individuals in relation to cost sharing is the responsibility of the sponsoring institution. This experience could be further enriched and adapted to Ethiopian context.

4.4. Conclusion

Based on the findings of the research, it is concluded that the Ethiopian Higher Education cost sharing policy is promoting equality than equity among University students while promoting inequity among graduate beneficiaries. This is because the policy addresses all students in the same way, concerning repayment modality, regardless of their wide gap in their socioeconomic background. Likewise the policy didn’t promote any differential treatment for the previously disadvantaged groups in the process of their

university education. Besides, the insignificant financial contribution of the scheme has fallen short of creating equity at access level. Therefore, the assumption of cost sharing policy to create strong synergy with the Education and Training Policy of the country so as to support the realization of equity is a far-fetched expectation. All these, as abundantly discussed earlier, are caused by the lack of strong stakeholders' participation on the design of the policy, the weak information and documentation system as well as weak follow-up by the concerned bodies which ultimately resulted to irregularities in the implementation of the policy.

4.5. Recommendations

Under this section, specific and targeted² recommendations are suggested for policy makers, practitioners and researchers.

4.5.1. For Policy Makers

1. It was learnt that the existing policies and practices attempt to address equity problems in higher education only by creating equal access to students with different backgrounds. However, equity needs to go beyond providing equitable access. Likewise, the cost sharing policy needs to address equity at process as well as outcome levels of higher education.
2. To make the cost sharing policy coherent with the basic values and objectives of our education system of which realizing equity is one, the policy need to be based on means testing whereby only needy students get targeted subsidy to borrow for cost sharing and repay it after graduation. Apart from realizing the above values, such practice will make the scheme more manageable and efficient. Thus, the model of the policy should be informed by means testing. **Providing the same service for every one erodes equity.**
3. To successfully implement the policy, loan scheme has to be introduced whereby one or more organs, say Commercial Bank of Ethiopia, borrow the money for the students and establish strong system for proper collection of the loan after graduation. Scholars such as Johnstone, (2003) and Woodhall, (2007) argue that cost sharing could not work alone unless associated with strong student loan.
4. The government need not directly involve in feeding and providing accommodation for university students. Instead however, it is possible to outsource such services to other organs, so that cost sharing would be limited only to tuition fee.

4.5.2. For Practitioners

1. Graduates need to be made aware of their rights and duties as well as the possibility of proceeding their further education if they can bring guarantee from their organization (be it government or non-government), just like public university staff who continue their further education after entered in to contract with their sponsors to serve the institution for certain time after their graduation. **Justice/equity starts by creating awareness about one's own rights and duties.**
2. The Ministry of Education needs to be vigilant of the irregularities happening here and there in terms of the repayment process and in relation to further education and make sure that the implementers are not violating the notion of equity. In general, the Ministry need to make sure that the beneficiaries get what they deserve and do what is expected of them as well. **Irregularities aggravate inequity.**
3. The amount borrowed to students for food and accommodation needs to be revised periodically.

4.5.3. For Further Research

1. The existing cost sharing collection system has proved ineffective as witnessed by the insignificant financial gains. Therefore, comprehensive research has to be done on how the repayment could be effectively collected.
2. The researcher observed that the contribution of cost sharing to equity at outcome level is the most under researched area. Thus, undertaking research related to this area can show how far the knowledge, skills and attitude of graduates are influenced by the existence of cost sharing scheme.

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