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Determinants of Demand for Open and Distance Learning in Ethiopia: The Case of Private Higher Education Institutions (PHEIs)

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Abstract

Many scholars have forwarded that higher education in general and the same in underdeveloped and developing countries in particular has been facing the challenges of access, cost and quality. What is worst is the trade off between these challenges. When universities try to increase access to higher education, the cost becomes unaffordably very high and quality will be compromised and when they work to meet quality, access will be restrained. Ethiopia is a typical example. Despite the very ambitious five year plan (2005-2010) of education sector development program (MoE, 2005) to increase participation rate from 1.5 percent to 5 and above percent, recent data showed that it is still at a level of 1.6 percent, (UNDP 2008). It becomes a day to day agenda on media that even such a very small increase has led the country's education system to compromise on quality of education. In most developing countries of Asia and Africa, ODL has emerged as a viable supplement and serious alternative to the formal system of higher education to tackle the challenges of access, cost, and quality and has shown phenomenal growth. ODL in PHEIs in Ethiopia, though started very recently, has contributed a lot in creating access to tertiary education down in each province in the country. However, data showed that there is enrolment fluctuation from one academic year to another academic year with a considerable decline in recent years. This paper, with its principal purpose of identifying the factors that have impact on the demand for ODL in PHEIs in Ethiopia, clearly indicates that several factors contribute to the alteration of ODL learners' enrolments in PHEIs. Data for this purpose have shown that policy related factors, employment related factors, cost related factors, livelihood related factors of ODL programs offered in PHEIs, cultural factors and some social factors influence enrolment growth in this sub-sector. Therefore, stakeholders need to think twice and shape their strategies in a way that make ODL mode of delivery contribute to the country's educational attainment thereby socio-economic development at its full potential with minimal cost and high quality.

ACRONYMS

APR:	Age Participation Rate
BOSS:	Bulletin of Student Statistics
CEIRQA:	Center for Educational Improvement, Research and Quality Assurance
CSA:	Central Statistic Authority
EFA:	Education for All
GER:	Gross Enrolment Ratio
GHEIs:	Government Higher Education Institutions
HEIs:	Higher Education Institutions
IGNOU:	Indra Gandi National Open University
MDGs:	Millennium Development Goals

MoE:	Ministry of Education, Ethiopian
ODL:	Open and Distance Learning
OLS:	Ordinary Least Squares Method
PHEIs:	Private Higher Education Institutions
SMUC:	St. Mary's University College
SPSS:	Statistical Package for Social Sciences
TEGIs:	Total Enrolment in Government Higher Institutions
TEPIs:	Total Enrolment in Private Higher Institutions
TFP:	Total Factor Productivity
TVET:	Technical, Vocational and Educational Training
UNESCO:	United Nations Educational, Scientific and Cultural Organization
UNISA:	University of South Africa

INTRODUCTION

Background of the Study

Ethiopia, located in the eastern part of Africa has a total population of 73.9million, (CSA Ethiopia, 2007). Aitchinson and Alidou (2009) forwarded that Ethiopia has a total population of 81,020,610 out of which adults constitute about 41,547,582. With this figure in mind, Ethiopia rates first in the number of illiterate adults from Sub-Saharan African countries comprising 64.1 percent followed, in numerical terms, by Nigeria which comprises about 23,282,763 illiterates which, in point of fact, amounts to 28% of its adult population.

Even though secular higher education started 60 years ago with the establishment of the University College of Addis Ababa, it has not expanded adequately. Strikingly, tertiary enrolment totaled only 4500 in 1970 out of a national population of 34 million, which meant the country had a 0.2% total enrolment, (World Bank 2004). Later on, after the Derge regime overthrew the emperor, government intervention in university affairs including security supervision, repression of dissent mandated courses on Marxism, prohibition of student organizations, and control of academic promotions through politically assigned university officers were expanded. The outcomes of these were degeneration of intellectual life on campuses, boosting of academic brain drain and disconnection of the country's education in the 20th century became regimented in its management, old-fashioned in its intellectual point of reference, limited in its autonomy, and faced by shortage of experienced staff, due to which the quality of education declined and the level of research outputs weakened.

Despite recent improvements in increasing the number of universities, semi-liberalizing the private higher education systems and expanding access to higher education in relative terms, the 2003 reform has not yet played any significant role in liberalizing university management and attracting experienced staff that boost problem solving research outputs and adds value to the quality of education. Besides, (MoE 2006-07), (Table 5.50) shows that, the distribution of education, particularly that of tertiary education, in Ethiopia is not only unfair, i.e. unequally

distributed between the rich and the poor, urban and rural, and male and female, but also extremely low.

Statement of the problem

The first privately owned institution of higher learning in Ethiopia dates back to 1954, (Kasirim Nwuke ,2008). However, the consent of the sector has begun late after the mid-1990s. Open and Distance Learning (ODL) in Private higher Education institutions (PHEIs) in Ethiopia is a recent phenomenon which is about a decade old. In the course of time, the demand for these institutions varies from year to year. In some academic years, the enrolment rate rises while in another academic year, it goes down. For instance in the case of St. Mary's University College enrolment trend in PHEIs show an increase for the first three academic years and a decline on the fourth year, (BOSS 2008). The following table will clearly show where the actual fluctuation and hence decline occurs.

	Govern	ment Under	graduat	e Degree	Non-Gove	ernment Un	dergradua	te Degree
	Regular	Evening		Distance	Regular	Evening		Distance
1999-2000	21265	6561	3172					
2000-2001	23320	6938						
2001-2002								
2002-2003	36049	12132	6104		1964	1777		
2003-2004	56072	18597	11394		2396	4974		4426
2004-2005	78232	28841	13311		4045	8621		5109
2005-2006	93689	26339	14182		7387	13058		19246
2006-2007	107960	39500	19856	1733	7885	15207		11258
2007-2008	127033	48362	34299	4505	8767	15089	35	24911

Table: 1.1. Undergraduate Enrolment in Government and Non-governmental HEIs

Source: (MoE 1999/2000-2007/2008), Summary of Education Statistics Annual Abstract

Hence, this study attempts to address the following basic (research) questions:

- ✓ Why do enrolment rates in ODL in PHEIs go up and down?
- ✓ What are the factors that influence the demand for ODL in PHEIs in Ethiopia?
- ✓ What impacts do the identified factors have on the demand for ODL in Ethiopia?

Objectives of the study

The general objective of the study is to determine the factors that hamper the demand for ODL in PHEIs in Ethiopia and make some recommendations that help the stakeholders enhance ODL enrolments and the contribution of this mode of delivery in the country's socio-economic development programme.

To be more specific, upon the completion of this research work, the research should be able to:

- > identify the factors that have impact on the demand for ODL in PHEIs in Ethiopia.
- > examine the impacts of these factors on the demand for ODL in PHEIs.
- suggest alternative ways and policy recommendations that help both the government and the PHEIs enhance the contribution of this mode of delivery in the socio-economic development of the country.

LITERATURE

Having started with a lower base in 1970, Sub-Saharan Africa has remained a world leader in terms of enrolment growth in higher education over the last four decades. It had the fastest average annual growth rate of 3.1% between 1970 and 2007 in the tertiary age population in comparison to the global average of 1.7%. While there were fewer than 200,000 students enrolled in tertiary institutions in the region in 1970, this number skyrocketed to over four million in 2007-a more than 20 fold increase in about 37 years time (UNESCO 2009).

However, the same evidence shows that there have been vast differences among countries within the region. For instance, the countries with two digit and hence top gross tertiary enrolment ratios from the region include South Africa (15.4%), Mauritius (14%), and Nigeria (10.2%). On the other hand, the ratio was quite low in countries such as Central African Republic (1.1%), Chad (1.2%), Mozambique (1.5%) and Ethiopia at about (2.7%). Despite a rapid growth of gross tertiary enrolment ratio (GER) from 1% in 1970 a long way to 6% of the tertiary age (Cohort in 2007) the region still has the lowest GER of all the other regions and is even very much lower than the global average of 26% in accommodating the appropriate age (cohort).

In spite of rapid expansion over the last several decades, the tertiary education system in Sub-Saharan Africa is not equipped to absorb the growing demand that results from broader access to secondary education. For instance, the region had a gross enrolment ratio of 19.4% for upper secondary education in 1999, which was over five times as high as the ratio for tertiary education enrolment, which is (4%). In 2007, the ratio for tertiary education in the region increased only to 6%, while the ratio for upper secondary education skyrocketed to five times the figure for tertiary education in the region (26.3%)(UNESCO, 2009). These large gaps between the two ratios witnesses that there will be many students completing upper secondary education who are eligible for higher education but do not have access to it. In other words, policymakers in Sub-Saharan Africa can expect further pressures to expand the tertiary education system in order to meet the continuing demand.

Rachel C. et al. (2007) draws attention to the reality that higher education in Sub-Saharan Africa has been faced by challenges of increasing demand that exceed capacity, lack of physical and human resources, gender and socio-economic inequality, missing linkage with labor markets, i.e. lack of appropriateness and lack of financing. Kanwar et al. (2009) intensified the brutality of the case by saying that even if one new tertiary institution were to be built in the developing world every working day for the next ten years, the demand for post-secondary education could not be met. Rapidly increasing numbers of young adults in the developing world will want education at all levels.

There is a choice between inadequate provision of higher education by a public-sector monopoly and meeting the demand by a combination of public and private institutions through both ODL and conventional mode of provisions. This is a political dilemma for many developing-country governments, which now realize that a public-sector monopoly on higher education is a serious handicap to national development.

First, the private sector, whether for profit or not for- profit on both conventional and ODL mode of provisions, will have a much larger role. Second, study programmes should be related more closely to livelihood so that learners could prepare themselves for employment

or otherwise for self-employment. Third, a far greater proportion of higher education will take place by distance learning, which many today call e-Learning which has a power of reaching to many with high quality and minimum cost. Fourth, and particularly in distance learning, one shall see the emergence of many cross-border partnerships that will improve the quality, lower the cost, and enrich the curricula of the courses on offer.

Given the country's population of over 81.02 million, not less than half of which is young, the public higher education provision sector, in spite of recent expansion, is unlikely to effectively respond to the rapidly expanding enrolments at the tertiary level that help meet the rising and urgent need of skills development for Ethiopia's infant economy. Over and above the limited access to tertiary education and hence a very small age participation rate (APR) in higher education (less than 2%), there is a wide gap in higher education attainment across gender and across space with the females and the remote rural areas being victims. The fact that Ethiopia is rushing to the universalization of primary education and to the expansion of secondary education so as to ambitiously meet the MDGs and EFA goals increases the pressure to accommodate the large secondary education output in the very costly underdeveloped conventional mode of delivery. For the aforementioned huge population of the country, the total enrolment in higher education is very low amounting to 270,356 students up until 2007/08 academic year. Only about a bit greater than 1.5% of the age group (18-23years) and about 2.7% of Gross Enrolment Ratio (GER) is currently achieved in higher education in Ethiopia.

Although private provision of higher education through conventional fashion is expanding from time to time, access to meet gender disparity and its contribution to bridge the geographical divide in higher education is far restrained modest. The only way most underdeveloped and developing countries will be able to raise their higher education participation rates to the level of 35% or more which is now found in developed countries is by relying much more on private universities and colleges and much more on ODL, (Daniel et al., 2007).

Developing countries like Ethiopia are far behind the attainment of equitable distribution of education for all communities using the very costly traditional mode of delivery. This fact is aggravated when seen in the face of tertiary education at which Age Participation Rate remains in the realm of less than 2% (Habtamu ,2008). The fact that global participation in higher education today is at a high record and by 2020, 40% of the global workforce will be knowledge workers (Kanwar et al., 2009) added with the current minimum age participation rate in most developing countries of Africa and South Asia (less than 10%), the potential demand for tertiary education is and will undeniably be burgeoning. Besides, government's budget for public universities becomes unaffordable very high. For example, public spending per tertiary student in Ethiopia is \$5501 which is much lower than that of high income country's but very much higher than that of per capita GDP in the country (UNESCO 2009).

RESEARCH METHODOLOGY

Sampling techniques

This research work relies on sample survey to infer about the population. Stratified random sampling technique has been deployed. The actual practice grouped distance learners in each study center into the program levels they belong to. Obtaining sample from distance learners have been done in such a way that the students from each programme level (TVET

programme, teacher education diploma programme, and undergraduate degree programme) have their own say. Simple random sampling technique has been deployed in distributing the questionnaires for distance learners at each programme level.

Tools of data collection

Questionnaire is the main tool of data collection. Informal as well as formal interviews have also been used as a tool of data collection.

Data collection

The study involved a group of TVET, teacher education diploma, undergraduate degree distance learners and postgraduate masters' degree ODL learners who have been learning in St. Mary's University College and Alpha University College during 2009/2010 academic year. The students are located in different parts of Ethiopia and are believed to provide concrete evidence on the determinants of demand for ODL in PHEIs in Ethiopia.

600 questionnaires were distributed to ODL learners in (51) study centers located in nine regional states and two administrative municipalities of Ethiopia with a return rate of 55%. Within each study center, a sample of distance learners was identified from each program level (TVET, Teacher Education Diploma, Undergraduate degree). Within each program level, 4 students were randomly selected comprising a total of 12 participants per study center.

Data regarding ODL have also been collected from secondary sources such as Summaries of Education Statistics Annual Abstract reports, published materials, professional literatures, records, working documents, policy documents, and internet sources. Besides, annual learner enrolment trend analysis has been employed for PHEIS ODL colleges to compare the trend with the government higher education institutions.

Measurement of variables

The dependent variable is demand for ODL in PHEIs. Using the definition of demand as "the maximum quantity of goods and services that one wants to buy with one's purchasing power" (Mankiw, 2000), the current study uses demand for ODL as dependent variable. This research work tries to measure demand for ODL using its intrinsic characteristics by assigning values to measure how they could describe the existence of demand for ODL. These characteristics include: (1) its capability to create access to large numbers and large area coverage including deprived regions with equitable service; (2) its schedule learner friendliness; (3) its ability to help students learn at their own pace as there is no competition for class room seats; (4) its relative cost effectiveness for learners; (5) its potential to accommodate part-time students; and (6) its ability to encourage lifelong learning. Values are assigned from 1 to 5 to rate the respondents' level of agreement regarding the contribution of the aforementioned intrinsic behaviors of distance education to the presence of demand for ODL. The largest number 5 corresponds to 'strongly agree' and the smallest number 1 to 'strongly disagree' with the numbers in between referring to 'slightly agree, moderately agree, and agree' in ascending order from 2 to 4. It is also assumed that, on average, values rated from 2.5 to 5 indicate the presence of high demand for ODL in PHEIs in Ethiopia with the rest lower values showing the dearth of demand for ODL.

It is usual to conjecture that demand for higher education could be influenced by political factors, economic factors, social factors and cultural factors. This paper is aimed at identifying the impacts of these factors on the demand for ODL in the Ethiopian context.

The independent variables in this research work are classified into 12 groups: 1) policy related factors (I), 2) policy related factors II 3) policy related factors III 4) livelihood related factors of the program offered in PHEIs, 5) social inconveniences, 6) society's and employers' values and attitudes on ODL offering PHEIs, 7) perceptions and beliefs of the society on ODL programs, 8) cost related factors, 9) cultural factors, 10) opportunity cost, 11) employment-related factors and 12) background and regional language differences. Policy-related factors in turn comprise policy instability, unequal access to employability as compared to conventional graduates and public higher education institutions graduates, lack of confidence in credibility of degrees/diplomas and certificates of ODL in PHEIs, complex way-outs to upgrade from lower levels of training to higher levels and governments' rejection of employment claims by PHEIs graduates.

The variable livelihood related factors of the program offered in PHEIs does also consist of the nature of occupation that the program of training prepares the learner for, and the relevance of the program offered in those institutions. Social inconvenience comprises complex family responsibility, unexpected divorce, lack of adequate infrastructure and distance between home and study center. Cost-related factors on the other hand comprise learners' income level, the size of tuition fee that PHEIs impose, price rise (inflation) for basic necessities like food, housing and clothing, and lack of educational facilities. Cultural factors are composed of the language(s) of instruction, lack of awareness of learners about the significance of distance learning, poor social coherence to study in groups and malicious rumors about the quality of service delivered by PHEIs.

With the same analogy as we measure the dependent variable, the impact of the above mentioned factors contributing to the 12 variables is measured by assigning values to quantify the level of gravity of these factors on the demand for ODL in PHEIs in Ethiopia. The number 5, in this case, means that the factor has a very serious negative impact on the demand for ODL in PHEIs in the country, while 1 corresponds to the absence of serious impact of the factor on the dependent variable. Upon assessment of the average impact of the independent variable policy related factors is concerned, values that exceed 2.5 are assumed to affect the demand for ODL in PHEIs in the country with the rest lower values indicating insignificant influence on the dependent variable.

Hypothesis and empirical strategies

The above mentioned 12 independent variables are supposed to have impact on the demand for ODL in PHEIs in Ethiopia. To test these hypotheses, the impacts of the aforementioned variables have been estimated for a specified linear regression model. The researcher has encountered only few related empirical studies that examine the determinants of demand for not ODL in PHEIs but education in general. Mwikisa (1999) pointed out that how high or low an individual's demand for education is determined by ones desire and ability to acquire/or improve the productivity of ones factors of production. In the analysis, Mwikisa applied the following empirical formula:

 $D_{ed} = f(WD, PE, DPC, OC, Se,...)$

Where D_{ed} = Demand for education;

WD= wage differential;PE= probability of employment;DPC= direct private cost;OC= Opportunity cost;Se= supply of educational facilities.

In this research work, taking the above model as a framework with some contextual modifications, the determinants of demand for ODL in PHEIs are thoroughly analyzed via multiple linear regression model. In doing so, some policy variable, social and cultural variables are included. As per regression analysis is concerned, the impact of different factors on the demand for ODL will be identified for a pre-specified linear regression model as formulated below. Holding classical linear regression model assumptions underlying the method of ordinary least squares (OLS) to happen, i.e. $\mu \approx IID(0, \sigma^2)$, $E(\mu x) = 0$, $E(\mu_i \mu_j)=0$ for i not equal to j and cov(x_i,x_j) =0 where x refers to the independent variables, the following model is used in this research work.

THE MODEL:

I. $D_{ODL} \equiv f(P_I, P_{II}, P_{III}, L, K, G, B, V_{at}, O_c, E_r, C_r, S_{inc}) + \mu_i$, where $D_{ODL} \cong$ demand for open and distance learning, *f* is a notation for the functional relationship between the demand for ODL and the factors that are assumed to affect the demand for ODL. The actual model used is a multiple linear regression model as defined in the following linear equation.

 $D_{ODL} = \beta_0 + \beta_1 P_I + \beta_2 P_{II} + \beta_3 P_{III} + \beta_4 L + \beta_5 K + \beta_6 G + \beta_7 B + \beta_8 V_{at} + \beta_9 O_c + \beta_{10} E_r + \beta_{11} C_r + \beta_{12} S_{inc} + \mu_i$ Where the β_i 's are the parameters

D _{ODL} =	demand for C	Open and Distance	Learning in PHEIs;
		•	

- P_I= Policy related factors I;
- P_{II} = Policy related factors II;
- P_{III} = Policy related factors III;
- K = Cultural factors;
- G = Background of ODL learners;
- B= Rough perceptions and beliefs about the quality of education;

L = Livelihood related factors of ODL programs offered in PHEIs;

- V_{at}= Society's values and attitudes given to Open and Distance learning;
- O_c= Opportunity cost of Distance learning;
- E_r= Employment related factors;
- C_r= Cost related factors;
- S_{inc}= Social inconveniences to attend ODL; and
- μ_i = the error term.

Testing the overall significance of the regression involves testing the hypothesis that none of the independent variables helps to explain the variation of the dependent variable about its mean. Formally, the null hypothesis is set as:

H₀: $\beta_0 = \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = \beta_8 = \beta_9 = \beta_{10} = \beta_{11} = \beta_{12} = 0$ against the alternative hypothesis;

H_A: Not all β_i values are zero, for $i \in 0, 1, 2, ..., 12$

Methods of data analysis

At this point in time, steps like categorization, coding, tabulation, and presentation of the data using tables and graphs are inherent in realizing robust results. The actual activity done is that data collected from different sources are categorized and mapped out into the different classifications of independent variables. Next, determining central values, percentages, standard deviations, modal values and variances using descriptive statistics and also presenting the summarized facts by tables are given due attention. The summarized data are then analyzed electronically using SPSS 17 application soft ware.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Analysis and interpretation from secondary data sources

After many governments understood that education could play a key role for economic growth and development, the pace of enrolment growth has become faster and faster. The fact that worldwide tertiary enrolment for the last two decades has exceeded the most optimistic forecasts and growth in higher education in most developing countries is scaling up at a very high rate while their Age Participation Rates (APRs) are still in the realm of less than 10% reveals the presence of undeniably higher potential demand for tertiary education. A landmark of 100 million enrolments was passed some years ago, and an earlier forecast of 120 million students by 2020 looks likely to be reached by 2010-of course with out the inclusion of part-time students in the attendance of which numbers have already passed 130 million (Daniel,2007).

To have a clear picture on regional differences in enrolment rates, an outline of enrolment trends is given in the following table. Sub-Saharan Africa now is striving towards extensive expansion of higher education.

Region	Years of tertiary enrolment in %					
	1970s	1980s	1990s	2000	2007	
North America and Western Europe	30	37	49	64	71	
Central and Eastern Europe				41	62	
Latin America and the Caribbean	6	13	17	23	34	
Central Asia				23	31	
East Asia and the Pacific	3	5	7	15	26	
Arab states				20	23	
South and west Asia	4	4	6	9	11	
Sub-Saharan Africa	1	2	3	4	6	
Global Average	9	12	13	19	26	

Table 4.1: Regional Comparison of Tertiary Gross Enrolment Ratio from 1970 to 2007

Source: UNESCO-UIS report (2009)

However, meeting the expanding demand for tertiary education has been bounded by resource constraints. Among these, the exorbitant or unaffordable public funding for the sector ranks first. Many countries in Sub-Saharan Africa have already faced the challenge of adequate funding for tertiary education. Hans d'Orville (2007) pointed out that Education is the largest and most costly societal system for which state monopoly will no longer be affordable in each level of schooling. By then, it comprised 1.3 billion students and teachers in the formal education system with a total public expenditure for education amounting US\$1,400 billion-of which some \$1200 billion are spent in industrialized countries and the rest in developing countries. Higher education alone was globally a US\$200 billion enterprise, involving 18 million students in almost 4000 public and private colleges and universities. Therefore, the problem of adequate funding has constrained countries to provide access to quality higher education.

The aforementioned fact added with the world's greater aspiration for about 15 to 30 million teachers by 2015, (Daniel, 2006), aggravates the problem of addressing the ever-expanding demand for higher education through the most costly conventional mode of delivery. The second could be lack of government commitment and diversion of policy direction to primary education universalization to the detriment of tertiary education. In the 1980s and 1990s, many of the low income country's national development plans, poverty reduction strategies, and foreign donors' programs had all given the priority to primary education. Christian Fauvelle-Aymar (2008) identified that such a promotion of primary education at the cost of higher levels is a counter productive strategy.

The third challenge is that most developing countries have stuck their higher education system to the model that can't be expanded with minimal cost. In countries with low access to higher education, the existing institutions (both public and private) conceive their roles too narrowly giving the maximum focus on teaching in classrooms. This method, besides its inability to provide access to the ever-expanding demand for higher education, is unsuitable for many adult lifelong learners and is also increasingly inappropriate for younger students who want to be employed, at least part time, so that they can afford to study.

The fourth challenge is the lack of awareness of the citizens of far removed least developed countries who have made themselves strange to the burgeoning technological developments even in this era of globalization. This could be due to under developed infrastructure and social and cultural intricacies that their ancestors and they themselves have been growing through. Culture, shared among society members consciously or unconsciously, shapes values, assumptions, perceptions and behaviour and these in turn have their own repercussions on people's interest to education as a whole (Boldley 1994) (Roblyer et al 1996).

Alternative cost effective higher education system that provides access to billions of students (both students of the relevant age group and lifelong learners) with the maximum attainable quality is required. Since few years back, most foreign donors and the World Bank, as their major change of direction from the propagation of primary education, argue that for countries to achieve sustainable economic development, the APRs in higher education must be in the region of 40 to 50%. But APRs are less than 10% of the relevant age group in most of South Asia and Sub-Saharan African countries (Daniel,2009), with the average for Sub-Saharan Africa still about 6%.

The challenge is so huge. As Daniel (2005) indicated, there are four billion people living at the bottom of the world economic pyramid. Conventional methods of schooling, however flexible and effective they may be in the right context, simply cannot address the scope and scale of the challenge. How can then developing nations respond to the massive demand for higher education that they are facing and they will be facing? Will the patterns of provision that have worked for industrialized countries suffice, or are new approaches needed? The answer for these questions will with no doubt incorporate a much greater role of private for-profit higher education institutions in addition to public institutions.

Building more brick and mortar institutions to cope with such demand is not a viable option for most countries. Just two witnesses to mention are that Dhaka University, Bangladesh could only enroll 10,000 of the 80,000 applicants in 2000, while in Kenya only 9,000 of the 40,000 qualified students could be accommodated in the public university system(Kapur hand Crowley, 2008). With no doubt, they need alternative approaches.

Therefore, not withstanding the several challenges that ODL itself has, the only viable option to address the ever-expanding demand for tertiary education with the urgent need for 40 to 50% of the relevant APRs by 2020 is the big push provision of ODL services in both public and private universities and colleges.

Analysis and interpretation from primary data sources

1. General characteristics of sampled ODL learners in Ethiopia

As per the primary data collected, out of 600 questionnaires dispatched, a few more than half of them (330), are returned. 70% of the respondents are of age less than or equal to 34 years and 45% of all respondents stayed out of school for less than 3 years before enrolling in their current Higher Institution. This shows that the youth are becoming well aware of the significance of distance education and lifelong learning in the country.

Age	Frequency	Percentage	Cumulative Frequen
55-64 years	1	0.3	0.3
65-74 years	1	0.3	0.6
45-54 years	33	10	10.6
35-45 years	64	19.4	30
15-24 years	66	20	50
25-34 years	164	50	100
Total	330	100	
Residence Area			
Rural (country side)	64	19.40	19.40
Regional towns (urban)	56	16.97	36.37
Zone towns	56	16.97	53.34
Province towns (Districts)	127	38.48	91.82
A.A/Dire Dawa	27	8.18	100
Total	330	100	
Types of Occupation			
Office Workers	132	40.0	40
Teachers	144	43.7	83.7
Field Worker	44	13.3	97
No Work	10	3.0	100
Total	330	100	

Table.4.2 Age, Area of Residence and Type of Occupation of Sampled Distance Learners

As shown in the above table, more than half of the respondents, i.e. 57.7% of all, reside in rural areas and if not, in districts or province towns. Regional and zonal towns account for about 34% of the respondents. This clearly fortifies the fact that distance education has its own innate capacity to outreach the unreached rural areas. 97% of the respondents are either self employed or are engaged in some institutions. Only 3% of the respondents do not have any thing to work. This indicates that most of the learners are part-time learners and/or lifelong learners who kill two birds with a single stone. On the one hand, they are active participants of the countries development tasks and pay tax to the state. On the other hand, they are learning to upgrade themselves both financially and their scale of productivity.

Questions were also asked to test learners' preference between conventional mode of delivery and the ODL mode. The table below presents the preference of sampled distance learners between conventional schooling and ODL and their studying preference between reading alone and studying in groups and the like.

No	Prefere	ences	Frequency	Percentage
	a.	ODL provision	96	29.1
1	b.	Conventional schooling	161	48.8
	с.	Missing Value	73	22.1
	Total		330	100
	a.	Studying alone	152	46.1
2	b.	Working in groups	173	52.4
	с.	indifferent	5	1.5
	Total		330	100
	a.	Communicating by letters	143	43.3
3	b.	Face-to-face communication	184	55.8
	с.	indifferent	3	.9
	Total		330	100

Table: 4.3 ODL Learners Preferences between Conventional Schooling and ODL

As the table shows, 48.8% of the respondents prefer the conventional mode of delivery to ODL and 28.8% prefer ODL. The rest 22.1% of them have a preference neither to conventional mode of delivery nor to ODL. In contrast to the aforementioned figures, 46.1% of the respondents prefer studying alone as compared to the 52.4% who prefer to study in groups. The table also shows that 43.3% of all the respondents prefer communicating using letters as opposed to 55.8% who prefer face-to-face discussion. The existence of people who prefer to work alone and communicate using written documents show the presence of a large number of candidates that justifies for distance learning. This in turn entails that ODL is not only an option when there is no chance for conventional mode of delivery but also a primary preference of a number of learners.

This might primarily include some policy factors, recent participation of public universities in offering distance education as a substitute for private provision, policy implementation problems, cost related factors, some social and cultural factors, and employment related factors. For example, there is no clear and officially declared policy on how to continue from TVET and diploma programs to undergraduate degree programs.

THE MODEL

This paper utilizes multiple linear regression models that are employed by most researchers.

Assuming that all classical OLS assumptions and the assumption of no multicollinearity hold, the model for this research work is given as:

 $D_{ODL} \equiv f(P_I, P_{II}, P_{III}, L, K, G, B, V_{at}, O_c, E_r, C_r, S_{inc}) + \mu_i$, where $D_{ODL} \cong$ demand for ODL, *f* is a notation for the functional relationship between the demand for ODL and the factors that are supposed to affect the demand for ODL. The actual model used is a multiple linear regression model as defined in the following linear equation.

 $D_{ODL} = \beta_0 + \beta_1 P_1 + \beta_2 P_{II} + \beta_3 P_{III} + \beta_4 L + \beta_5 K + \beta_6 G + \beta_7 B + \beta_8 V_{at} + \beta_9 O_c + \beta_{10} E_r + \beta_{11} C_r + \beta_{12} S_{inc} + \mu_i$ Where the β_i 's are the parameters;

D _{ODL} =	demand for Open and Distance Learning in PHEIs;
P _I =	Policy related factors I;
$P_{II} =$	Policy related factors II;
$P_{III} =$	Policy related factors III;
L =	Livelihood related factors of ODL programs offered in PHEIs;
K =	Cultural factors;
G =	Background of ODL learners;
B=	Premature perceptions and beliefs about the poor quality of education;
$V_{at}=$	Society's values and attitudes given to ODL;
O _c =	Opportunity cost of distance learning;
E _r =	Employment-related factors;
C _r =	Cost-related factors;
$S_{inc} =$	Social inconveniences to attend ODL; and
μ _i =	The error term
near regres	sions are run on a statistical package for social sciences (SPSS) on the

Multiple linear regressions are run on a statistical package for social sciences (SPSS) on the above specified model and the output is organized in the following table. As indicated in table 4.5, 17.9% of the change in enrolments of ODL in PHEIs is attributable to the independent variables specified in the model.

	Unstandardized Coefficients		Standardized Coefficients			Collinearity	Statistics	
Model	В	Std. Error	Beta	Т	Sig.	Tolerance	VIF	
Constant	2.431	.233		10.454	.000.			
Policy1	.012	.048	.016	.252	.801	.655	1.527	
Livelihood	.008	.042	.011	.191	.848	.755	1.325	
Socialincon	040	.046	052	878	.380	.745	1.342	
Costrltd	.118	.044	.153	2.668	.008***	.788	1.269	
Cultural	.135	.050	.157	2.711	$.007^{***}$.773	1.293	
Oppocost	074	.039	103	-1.894	$.059^{*}$.868	1.152	
Policyrltd 2	.120	.042	.167	2.880	.004***	.774	1.292	
Employmentrltd	.100	.049	.116	2.025	.044**	.790	1.266	
Believes	161	.045	209	-3.579	$.000^{***}$.759	1.317	
Bacgrndandlan	.038	.048	.046	.782	.435	.750	1.334	
Policyrltd 3	.107	.053	.131	2.009	.045**	.608	1.646	
Valuesandattid	.019	.039	.028	.501	.617	.854	1.171	
R	0.4242							
\mathbb{R}^2	0.179776							
Adjusted R ²	0.148							
Standard Error of the estimate	0.665	11						

Table 4.4: OLS Estimation Results and Collinearity Statistics

* Significant at 0.1 ** Significant at 0.05 *** Significant at 0.01

Appropriate caution has been taken on the impacts of multicollinearity and heteroscedasticity. The variance inflation factor (VIF = $\frac{1}{Tolerance}$) calculated (<10) has shown that there is no multicollinearity problem among several independent variables. Thus, the estimated equation of the above model is:

$$D_{ODL}^{'} = 2.157 + 0.016P_{I} + 0.011L - 0.052S_{inc} + 0.153C_{r} + 0.157K - 0.103O_{c} + 0.167P_{II} + 0.116E_{r} - 0.209B + 0.046G + 0.131P_{III} + 0.028V_{attr} + \overset{\Lambda}{\mu_{i}}$$

The estimated parameters signify that the combined effects of policy-related factors, employment related factors, livelihood related factors of ODL programs offered in PHEIs, cultural factors and cost related factors have serious negative impacts on the demand for ODL in PHEIs in Ethiopia.

Policy related factors

For the sake of identification of the three distinct variables, the researcher named them as policy related factors (I), policy related factors II, and policy related factors III. These factors are either direct policy issues or policy implementation related concerns.

Values	Poli	cy insta	bility	Unequal access to employability		Lack of confidence on credibility			Rejection of employ't claims by gov't			
	Freq	%	Dicho	Freq.	%	Dicho	Freq.	%	Dicho%	Freq.	%	Dicho%
			%			%						
Not very	44	13.3	26.3	33	10.0	24.8	44	13.3	31.2	41	12.4	
seriously												
Not	43	13.0		49	14.8		59	17.9		63	19.1	31.5
seriously												
Moderately	89	27.0	73.7	84	25.5	75.2	100	30.3	68.8	83	25.2	68.5
Seriously	67	20.3		85	25.8		83	25.2		76	23.0	
Very	87	26.4		79	23.9		44	13.3		67	20.3	
seriously												
Total	330	100	100	330	100.0	100	330	100.0	100	330	100	

Table 4.5: Percentages and Frequencies showing the level of NI of Policy related Factors I

Policy related factors (I) include policy instability and unpredictability, unequal access to employment, lack of confidence in the credibility of degrees, diplomas and certificates of ODL, and government's rejection of employment claims of PHEIs' distance graduates. Frequent amendments of TVET programs, recurrent change of courses to be offered and regular come and go of higher authorities of the ministry of education might also attribute to the fluctuations of ODL enrolments in PHEIs in the country.

On average, 71.55% of the respondents agree that policy-related factors (I) have a moderate to very serious negative impact on the demand for ODL in PHEIs in the country. To summarize the separate impacts of each of the component factors, 75 .2% of the respondents witnessed that lack of equitable access to employability has moderate to very serious negative impact on the demand for ODL in PHEIs. 68.8% of all the respondents reply that the negative influence of lack of confidence on the credibility of degrees, diplomas and certificates of ODL in PHEIs range from moderate to very serious. In a similar fashion, 68.5% and 73.6% respectively of all the respondents have testified that government's rejection of employment claims of PHEIs' ODL graduates and policy instability and unpredictability range from moderate to very serious negative impact.

The other variable to be explained is policy-related factors II.

Values	Co	mplex Way	-outs to upgrade	Lack of Permission for Tutorial			
	Freq.	%	Dichotomized %	Freq.	%	Dichotomized %	
Not very seriously	36	10.9	28.48	48	14.5	30.3	
Not seriously	58	17.6		52	15.8		
Moderately	83	25.2	71.52	90	27.3	69.7	
Seriously	73	22.1		74	22.4		
Very seriously	80	24.2		66	20.0		
Total	330	100.0	100.0	330	100.0	100	

Table: 4.6. Percentages and Frequencies showing the level of NI of Policy related Factors II

As per the figures are concerned, on average, 67.3% of all the respondents confirmed that policy related factors II have a moderate to very serious negative force on the demand for ODL in PHEIs in the country. The testimony given by 71.5% and 69.7% respectively of all the respondents show that complex way-outs to upgrade from TVET and diploma levels to undergraduate degree level and prohibition of permission or annual leave for tutorials and term end exams have from moderate to very serious deterrent influences. Purposeful refusal of annual leave by zone and Woreda bosses is not only because of serious engagements at work place but also from their intrinsic jealousy and suspicion that ODL learners might overtake their position after graduation. Outputs from the model clearly indicate that policyrelated factors II have significant impact on the demand for ODL in PHEIs in Ethiopia. At 0.01 level of significance and 12 degrees of freedom, the probability of rejecting the null hypothesis that policy related factors II has not any impact on the demand for ODL in PHEIs in Ethiopia is insignificant, i.e. very small. This implies that policy related factors II have a serious negative impact on the demand for ODL in Ethiopia. To recapitulate the figures from table 4.7, a unit change in policy-related factors II will bring about a 0.167 unit change on the demand for ODL in PHEIs in Ethiopia. The third group of policy related factors is named as policy related factors III. This variable encompasses lack of clarity of upgrading policy from TVET and diploma programs to undergraduate degree, stiff entry criteria to different program levels, lack of recognition of degrees, certificates and diplomas of PHEIs' ODL graduates by other institutions and poor awareness of zone and Woreda higher authorities about the significance of ODL offered by PHEIs in the country. The following table shows the level of seriousness of the above factors on the demand for ODL in PHEIs in Ethiopia.

Unclear policy to upgrade from lower levels to higher levels of training							
Level of seriousness	Frequency	Percentage	Dichotomized percentage				
Not very seriously	35	10.6	27				
Not seriously	64	16.4					
Moderately	67	20.3					
Seriously	90	27.3	73				
Very seriously	84	25.5					
Total	330	100					
Poor awareness of zone a	nd Woreda bos	sses about the signific	cance of ODL in PHEIs				
Not very seriously	23	7	27.3				
Not seriously	67	20.3					
Moderately	80	24.2					
Seriously	88	26.7	72.7				
Very seriously	72	21.8					
Total	330	100					
Lack of recognition of cr	edentials of PH	EIs by other higher i	nstitutions				
Not very seriously	36	10.9	29.1				
Not seriously	60	18.2					
Moderately	84	25.5					
Seriously	90	27.3	70.9				
Very seriously	60	18.2					
Total	330	100					
Stiff entry criteria to diff	erent program	levels					
Not very seriously	30	9.1	26.4				
Not seriously	57	17.3					
Moderately	120	36.4	73.9				
Seriously	78	23.6					
Very seriously	45	13.9					
Total	330	100					

Table: 4.7 The level of Negative Impacts of Policy-Related Factors III, N=330

This variable does also have significant impact on the demand for ODL. At 0.05 level of significance and 12 degree of freedom, the probability of rejecting the null hypothesis that policy related factors III has no significant impact on the demand for ODL in PHEIs is very small. This implies that policy related factors III significantly affect the demand for ODL in PHEIs in the country.

Livelihood related factors of ODL programs offered in PHEIs

Livelihood related factors of the ODL programs offered by PHEIs refer to the relevance of the programs in alleviating poverty and hunger which are the severe problems in most developing countries. The variable named as livelihood-related factors of the programs offered in PHEIs refers to the relevance of the trainings that PHEIs provide for ODL students. When we say relevance, we mean the ability of the program in creating job opportunity, its pre-eminence in assuring food security, and the nature of occupation it creates in the job market. The higher the job opportunity that an ODL program offers, the greater is the demand for ODL in PHEIs. If a program warrants attractive salary upon graduation, it can attract greater enrolments regardless of its opportunity costs. Hence, the following table shows the current status of ODL offering PHEIs with regard to their potential in providing training that creates means for learners' livelihood.

Values	Nature of occupation an ODL program could create			Relevance of the programs offered			
	Frequency	%	Dicho%	Freq.	%	Dicho%	
Not very seriously	55	16.7	35.8	56	17.0	36.1	
Not seriously	63	19.1		63	19.1		
Moderately	97	29.4	64.2	123	37.3	63.9	
Seriously	79	23.9		50	15.2		
Very seriously	36	10.9		38	11.5		
Total	330	100.0	100	330	100.0	100	

 Table: 4.8. The Seriousness of the negative impact of livelihood related factors, N=330

As indicated in Table 4.8 63.9% and 64.2% respectively of all of the respondents confirmed that relevance of the programs offered in PHEIs and the nature of occupation these programs could create, range from moderate to very serious negative impact. On average, 64.05% of all the respondents replied that ODL programs in PHEIs pertain to livelihood from moderate to very serious. This itself does have its own detracting consequences on the demand for ODL in PHEIs in Ethiopia.

Employment related factors

Unemployment is a serious macroeconomic problem in most developing countries of Africa and South Asia. On the average, 70.155% of the respondents replied that the negative impact of employment related factors vary from moderate to very serious. The following table describes the level of seriousness of the impacts of employment related factors on the demand for ODL in PHEIs.

Factors	Percentage of respondents who replied from moderate to very seriously	Percentage of respondents who replied from not serious to not very serious		
Expected return	71.52	28.48		
Probability of employment	75.46	24.54		
Waiting time	73.93	26.07		
Presence of subs. Gov. institutions	59.7	40.30		

 Table: 4.9 The Level NIs of Employment Related Factors on the Demand for ODL, N=330

With 0.05 level of significance and 12 degrees of freedom, the relationship between demand for ODL in PHEIs and employment related factors is significant. The probability of rejecting the null hypothesis that employment related factors does not have any impact on the demand for ODL is 0.044 which is less than 0.05. Hence, employment related factors have significant negative impact on the demand for ODL in PHEIs in Ethiopia.

Cost related factors

On the average 69.13% of all the responses show that cost-related factors have from moderate to very serious negative impact on the demand for ODL in PHEIs in Ethiopia. Separate descriptive analysis proved that 70% of the respondents could not enroll in ODL in PHEIs due to their inability to pay tuition fee. Similarly, 235 respondents replied that the size of tuition fee in PHEIs has from moderate to very serious restraining effect. Out of the 235 respondents, 44.68% (nearly half of them) indicated that the size of tuition fee has only moderate repressing impact on the demand for ODL in PHEIs in the country. 234 respondents showed that price rise for basic needs such as food, shelter and housing has from moderate to very serious negative impact on the demand for ODL in PHEIs in the country.

What is unique about this factor is that over 45.73% of the 234 respondents indicated the presence of very serious smothering impact on the demand for ODL in PHEIs in Ethiopia. 64.42% of the respondents have also indicated that lack of educational facilities have from moderate to very serious proportionate negative impact on the demand for ODL in PHEIs in Ethiopia.

When we see the significance of the variable, multiple linear regression model has shown that the probability of rejecting the null hypothesis that cost related factors have no impact on the demand for ODL in PHEIs is almost zero, i.e. 0.008. Therefore, at 0.01 level of significance and 12 degrees of freedom, one can observe from SPSS output table 4.6 that cost related factors have significant impact on the demand for ODL in PHEIs in Ethiopia.

No	Variables and factors attributing	Values Given for the Factor by the Respondent									
110	to these Variables	NVS		NS		M		S		VS	
		F	%	F	%	f	%	f	%	f	%
1	Cost Related Factors										
	Income level of ODL learner	50	15.2	49	14.8	105	31.8	67	20.3	59	17.9
	Price rise for basic needs	49	14.8	47	14.2	53	16.1	74	22.4	107	32.4
	Size of Tuition fee	46	13.9	49	14.8	105	31.8	90	27.3	40	12.1
	Lack of educational facility	54	16.4	64	19.4	80	24.2	59	17.9	73	22.1
2	Cultural Factors										
	Feeble awareness about ODL	55	16.7	63	19.1	104	31.5	71	21.5	37	11.2
	Pessimistic hearsays about ODL	29	8.8	56	17.0	91	27.6	106	32.1	48	14.5
	Poor social coherence for studying	43	13.0	67	20.3	98	29.7	83	25.2	39	11.8
	The language of instruction	57	17.3	76	23.0	76	23.0	75	22.7	46	13.9
3	Opportunity Cost										
	Opportunity cost of ODL learning	44	13.3	63	19.1	108	32.7	66	20.0	49	14.8
	Lack of time for ODL attending	58	17.6	73	22.1	89	27.0	62	18.8	48	14.5
4	Background and Lang. Diff										
	Poor high school background	47	14.2	67	20.3	100	30.3	71	21.5	45	13.6
	Regional language difference	66	20.0	80	24.2	78	23.6	59	17.9	47	14.2

4.10 The level of NIs of Cost Related Factors, cultural factors, opportunity cost, and background and language difference

f=frequency, %=percentage NVS= Not very serious, NS= Not serious, M= moderately serious, S= Serious, VS= Very serious

Cultural factors

Culture is also supposed to have influence on the demand for ODL in PHEIs in the country. On average, 66.2% of all the respondents replied that the impact of cultural factors (K) range from moderate to very serious. When we see the separate impacts of these factors, the negative impact of unconfirmed hearsays on the quality of service provided by ODL offering PHEIs outweighs the impacts of the other factors. 245 respondents agreed that this factor has between moderate to strong impact on the demand for ODL in PHEIs in the country. The modal values of the factors in the order arranged above are moderately agree, agree, moderately agree and not agree/moderately agree respectively. The language of instruction has a bimodal value with the values being 2 and 3 respectively.

As stated by the linear regression outputs described earlier, K has significant impact on the dependent variable. At 0.01 level of significance and 12 degrees of freedom, the probability of rejecting the null hypothesis that cultural factors have no any influence on the demand for ODL in PHEIs in Ethiopia is insignificant (i.e. 0.007). Keeping all other contributing factors constant, a unit change in cultural factors could bring about a 0.135 unit change in the dependent variable.

Opportunity cost of distance learning

An Opportunity cost of ODL refers to the benefits that an individual learner will miss while he is attending his ODL program in PHEIs. The factors that constitute the variable opportunity cost of distance learning are lack of time and lost benefits elsewhere while an ODL learner devote himself/herself to his/her study. It is clearly observed that opportunity cost of ODL in general and the same in PHEIs in particular is minimal. As opposed to the hypothesis, opportunity cost of ODL in PHEIs in Ethiopia is seen to reduce the demand for ODL in PHEIs moderately. As shown in the following table, over 61.2% of all the respondents replied that the negative impact of opportunity cost on the demand for ODL is moderate or less. Parameter estimates of this variable showed that at 0.1 level of significance and 12 degrees of freedom, it has a significant encouraging impact on the demand for ODL in PHEIs.

Social factors

The major social factors identified to have influence the demand for ODL in PHEIs are Social Inconvenience and Values and Attitudes of society and employers on ODL.

		Dichotomized Percentage						
0	Variables with their components (Mf=modal frequency)		HSNI	HSNID				
2		f	%	f	%			
	Social Inconvenience (Modal value for Mf ₁ =Mf ₂ =3 & Modal value for Mf ₃ =1)							
	i. Complex family responsibility $(Mf_1=94)$	117	35.45	213	64.55			
1	ii. Lack of infrastructure for ODL ($Mf_2=89$)	115	34.85	115	65.15			
	iii. Unexpected divorce leading for family disorder ($Mf_3=105$)	167	50.61	163	49.39			
	Values and Attitudes of society and employers on ODL (Modal values for Mf ₄ =Mf ₅ =3)							
2	i. Society's and employer's attitudes on ODL grad. ($Mf_4=110$)	90	27.27	240	72.73			
	ii. The values given to ODL by the society ($Mf_5=112$)	91	27.58	239	72.42			

Table 4.11: Dichotomized impacts of social variable on the demand for ODL in PHEIs

DNHSNI=don't have serious negative impact on the demand for ODL in PHEIs, HSNID=have serious negative impact on the demand for ODL in PHEIs

On average, 72.57% of all the respondents ranked the impact of values and attitudes that the society and employers have towards the demand for ODL in PHEIs between moderate and very serious. To have balanced outlook on the separate impacts, over 240 respondents of all pointed out that the society's and employer's values to ODL has from moderate to very serious influence on the demand for ODL in PHEIs in the country. To make it further explicit, about 46.67% of these respondents witnessed that the factor has only moderate restraining influence on the demand for ODL in PHEIs. As per the impact of society's attitudes is concerned, it does have almost about the same impact as that of the factor society's and employer's values to ODL. It has moderate repressive impact. This could be due to the intrinsic encouraging features of ODL mode of delivery to provide equal access to higher education for deprived regions and even for prisoners. It is also cost effective relative to conventional mode of delivery and helps learners study while they are working and living with their family. The fact that there is no need to go to campuses in search of lecturers could be another reason for its positive impact on the demand for ODL in PHEIs.

All the aforementioned facts lead to the conclusion that ODL is enjoying enthusiastic reception. Another testimony could be the burgeoning enrolments ever seen in the first three years to the country's PHEIs programs. This is very helpful and encouraging in paving the road leading the general public towards the knowledge society and contributing to meet the appointment that 40% of the global work force should be knowledge workers by 2020. Therefore, as ODL offering higher education institutions progress their provision and policy and cost related obstacles get improved, massification of lifelong learning thereby improvement of competency and excellence at work places will be the day to day activities of the society in the country.

The second social variable is social inconveniences to enroll in ODL program. On average, 59.72% of the impact of social inconvenience on the demand for ODL ranges from moderate to very serious. Unexpected divorce leading to family disorder has very low repressing effect on the demand for ODL in PHEIs. The modal value for its negative impact on the demand for ODL in PHEIs is 1, i.e. not very serious.

CONCLUSION AND RECOMMENDATION

Conclusion

Ethiopia's tertiary education attainment is still very much restrained at a GER of 2.7% and APR of 1.6% and needs to expand its higher education to produce tertiary level trained human resources that are crucial for poverty alleviation and development. The expansion process could be either continuing or conventional mode of delivery. Contrary to the glimmer of light in the overall growth of tertiary education in recent years, it seems that the issue of quality and the contribution of ODL sub-sector have been lacking recognition. Literature has shown that the ODL sub-sector has innate capacity to grow within a short period of time.

However, there are some disheartening factors that seem to smother the flame knowledge that has been reaching the deprived over the last few years. Policy-related factors, employment related issues, cultural-factors and inflation are seen to put their oppressive forces on its consent. This means stakeholders need to design appropriate ploy to raise the level of tertiary education attainment and quench the thirst of the country for tertiary level qualified workforce.

Recommendations

In order to withstand the negative impacts of the aforementioned determinant factors, the researcher forwards the following recommendations.

- 1. Alteration of educational policies is a requirement to meet the challenges of our changing world. But, superfluous changes are more a deterrent than an agent to progress. Our problem is superfluous change. If need arises for policy modification, stakeholders should participate in the discussion so much so that its effect could be reduced. It is also very much important to release action plans for discussion among stakeholders before the action of implementation.
- 2. For the realization of overall development of PHEIs, the government should provide ample support. In doing so, the state should have encouraging policies, give accreditation to those who deserves and trust their implementation with a noncompromising control on the quality of education, need to provide PHEIs with land, and make the public sure about their accreditation. The graduates should enjoy equal advantage with that of conventional public and private higher education institutions' graduates in terms of creating employment opportunities, providing chances for further studies and creating chances to compete for any open job without partiality.
- 3. Education policies should not be prohibitive at any level of training. Lifelong learning should get the maximum attention in the country. As far as a candidate surpasses the minimum requirements of the entry criteria to a given program level he/she applies for, he/she must be allowed to study the open field that she/he opts for. Especially, upgrading policies from TVET and diploma programs to undergraduate degree look prohibitive as there is a need to have two years experience to advance from diploma

to degree program. A person who lacks job opportunity and wants to advance his/her studies does not have the chance to do so. Besides, even though the candidate has got two years work experience, s/he can not study what he wanted apart from his/her previous specialization. Therefore, the state needs to slacken the tightness of upgrading standards in a way that could be reachable and in a way that could reduce idle citizens in the country.

- 4. Though it is relatively at its nascent stage, development of both public and private sectors have been improving employment opportunities in the country. The principal tenet for employment should however be competencies of applicants. The state, in steady of declaring not to employ PHEIs' teacher graduates, should rather rely on competence for whoever qualified applicants the open job is looking for. This does have crucial contribution for the well accomplishment of the task(s) to be undertaken by the prospective employee both at process and output level. This is not to refute the fact that competition can bring quality services and the choice for quality services should be left to the consumers of the service. But, in a developing country like Ethiopia where the issue of quality service is not talked about now and then, transitory assistance and public empowerment to help them identify quality services should be encouraged. It is only then that ODL offering PHEIs could enjoy rapidly increasing learner enrolments.
- 5. ODL offering PHEIs should prepare a combination of printed materials, audio and video cassettes, broadcasting Medias, satellite conferencing systems, video conferencing systems and teleconferencing systems to help strengthen the quality of their service thereby growing student enrolments. The development of some of these technologies such as teleconferencing, interactive radio counseling, and educational satellites may be so high that it may not be realized in the near future. However, they should start with the very simple audio and video cassettes and try to strive for the expensive ones in the long run.
- 6. Although the government has been taking some measures to stabilize the market, further efforts should be made to help reduce prices as the income of most citizens does not go beyond satisfying their basic needs. Or the state should look for alternative strategies that could increase the income of the general public. It is then that the repressive impact of inflation on the demand for ODL in PHEIs can be reduced.

REFERENCES

- Aitchinson J. and Alidou H. (2009). The State and Development of Adult Learning and Education in Sub-Saharan Africa: UNESCO's Regional synthesis Report.
- Asha Kanwar & Daniel S. (2009). Distance Education for the Twenty first century: Commonwealth of Learning.
- Christian Fauvelle-Aymar (2008). Education, development and the MDGs in Sub-Saharan Africa- The foundations of Educational Policies and some Estimation on the Benefits of Post-Primary Education in Ethiopia, CFEE-French Center for Ethiopian Studies.
- C.N. Mwikisa March (1999). Social/Private Benefits and Costs of Education, Policy Implications for Financing Higher Education, University of Zambia, Economics Department
- Daniel S. (2005). Open and Distance Learning and the Developing World, 11 November 2005, Adelaide, Australia; AnnualConference.

- Daniel, S. (2007). The Expansion of Higher Education in the Developing World: What can Distance Learning Contribute? CHEA International conference, February 2007, Washington, DC
- Habtamu (2008). Proceedings of the Second Annual Research Conference on Higher Education, Research and Governance in Capacity Building in Ethiopia, July 18-19, 2008, Addis Ababa, Ethiopia
- Hans d'Orville (2007). UNU/UNESCO international conference on PATH WAYS TOWARDS A SHARED FUTURE: Changing roles of higher education in a Globalised World; Tokyo, 29-30 August 2007-UNU headquarter

Kasirim Nwuke (2008). The provision of higher education in Ethiopia: Growth, Challenges and Prospects.

- Rachel Chut and LoveenaDookhony (2007). Harvesting the future: The case for higher education in Sub-Saharan African countries: The Maxwell School of Citizenship and Public Affairs
- Syracuse University, October 17th, 2007
- Roblyer, M., Dozier-Henery, O., &Burnette, A. (1996). Technology and Multilateral Education: An Uneasy Alliance. Educational Technology, 36(3) 5-12.
- Nwaocha, V.O^a, Inyiama H.C^b (2008). Open and Distance Learning: Successful Implementation in Nigeria.
- BOSS (2008). St. Mary's University College-Center for Educational Improvement, Research and Quality Assurance (CEIRQA)-MIS Unit, Bulletin of Student Statistics
- CSA- Ethiopia (2007). Central Statistics Authority Summary and Statistical Report, 2007.
- MoE (2008). Education Statistics Annual Abstract 1999 E.C. /2006-2007 G.C.
- MoE (2009). Education Statistics Annual Abstract 2000 E.C. /2007-2008 G.C.
- UNESCO (2009). Brain Gain Initiative: A Digital Infrastructure Linking Africa and Arab Region Universities to Global Knowledge.
- UNESCO-UIS (2009). Global Education Digest 2009: Comparing Education Statistics across the World Montreal: UNESCO Institute for Statistics
- World Bank (2003). Higher Education Development for Ethiopia: Pursuing the Vision; a World Bank Sector Study, January 20, 2003.
- Europa, (2003). European Commission: Policy Areas: Lifelong Learning, What is LifelongLearning?http://europa.eu.int/comm/education/policies/lll/life/what_islll_en.html, Retrived on: 02-11-2009.
- Jones, R. (2003). A recommendation for managing the predicted growth in college enrollment at a time of adverse economic conditions. Online Journal of Distance Learning Administration (6)1.RetrievedDecember, 2009:http://www.westga.edu/~distance/ojdla/spring61/jones61.htm