

Demand Side Constraints in Private Higher Education in Ethiopia

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Abstract

There exists a general consensus that education is an economically and socially productive investment. Research findings confirm that both private and social returns to education are significant. In many countries, education is mainly provided by the government though there are major shifts from this trend in recent years. Private investment in education is increasing in countries around the world and quite noticeably so in developing countries. Ethiopia's case is no exception. The substantial increase in private investment on higher education coupled with increased public investment has led to significant supply side expansion. Both researchers and policy makers alike have focused on the supply side problems ignoring the demand side of the story. A mere supply side expansion, however, does not guaranty that the demand is matched proportionately across all members of the society. This paper identifies and presents the major demand side constraints in the market for higher education in Ethiopia.

The findings of the paper would enable the researcher to argue that if proper financing mechanisms are put in place there is a possibility to overcome the demand side constraints. The paper is based on both published materials and information obtained from primary sources.

1. Background

1.1. Introduction

Much has been said about the overall contribution of education in development endeavours of a country. Studies around the world indicate that there are significant private and social returns to education in general and to higher education in particular. Writers have argued that through direct contributions to economic growth by influencing the nation's productivity and international competitiveness, through redistribution and empowerment, and through strengthening the entire education sector (World Bank Higher Education Development for Ethiopia 2003), tertiary education plays an important conditioning role in poverty reduction.

Being student cognizant of this fact, the Ethiopian government is attempting to expand the sub sector. Total enrolment has increased from 30,000 before 2000 to 91,719 in 2001/2002. The share of private institutions in the supply side expansion is not only significant but is also growing. Private institutions now constitute 20% of total enrolment of students and have registered a marked 40% growth between 1999/2000 and 2001/2002 (Ibid). These factors taken together, policy makers and researchers alike have focused on the success of supply side expansion that the demand side of the story is ignored to the worst and barely discussed at best. It is very essential, however, to check whether this supply side boosts is accessiblty to the large majority of the poor.

As no considerable study has been made to date focusing on equity issues, this paper is expected to fill this gap.

1.2 Objectives of the Study

Indeed presenting a panoramic assessment of the main demand side issues facing private higher education in Ethiopia is a daunting, if not impossible task. The objective of this paper is not thus to identify and discuss all possible demand side constraints. This paper will focus on the financial side constraints by comparing the cost of going to higher education with the paying capacity of the students and attempt to suggest some solutions regarding this. The main objective of this study is therefore to identify the main demand side constraints facing private tertiary education institutions and then come up with some recommendations that may help overcome these constraints.

1.3 Research Methodology

The paper is based on information obtained from primary and secondary sources. For the purpose of undertaking the research, a questionnaire was administered to almost all accredited private institutions. Unfortunately, the response rate was very poor. And this would obviously limit some of the conclusions drawn. In any case, to minimize this problem, efforts were made to gather information from other sources such as yearly abstract of CSA and extensive interview with the registrar offices of some of the colleges. The information obtained in this manner was analyzed and is presented in the form of tables using percentages and ratios when needed.

2. Results and Discussion

2.1. General Overview

In Ethiopia, the task of providing higher education had been the task of the government for decades. Before the opening of *University College, A.A.* (now Addis Ababa University), the then government used to send students to overseas colleges and Universities. The opening of the University College, A.A. has offered more chance to students. All cost of university students (including pocket money) was paid by the government. This trend has changed as the number of students increased. And now as is the case in other countries, providing higher education is becoming beyond the capacity of the government. Education is an economically and socially productive investment. In many countries it is financed and provided predominantly by the government. The expansion of education, therefore, depends on fiscal resources. In recent yeas, however, adverse macroeconomic conditions and keen intersect oral competition for public funds have reduced most governments' ability to continue expanding education. (Psacharopoulos and Patrinos 2002).

This reality has also forced the Ethiopian government to embark on cost sharing mechanism to lessen the burden to a certain extent. Even under these conditions the capacity of public colleges

and universities is too small compared with the existing demand for higher education. Though it is a recent phenomenon, the role that private higher education instutions are playing in filling this gap, is significant. Private institutions now constitute 20% of total enrolment and have registered a marked 40 % growth between 1999/2000 and 2001/2002 (World Bank, 2003).

Private higher institutions now provide a number of certificate, diploma, and degree level courses on demand basis. Recently, there are attempts to launch even a master's program. All of the private colleges offer diploma programs; a half dozen of them have mounted degree programs, and one has initiated a Master's degree program. This private institutions offer diverse educational programs often not available in the public institutions; provide access to growing numbers of students who might otherwise not be admitted to tertiary education; enable a significant expansion of tertiary enrolments at very little additional cost to the government...(The world Bank 2003 Page No.)

Seven years ago, there was no private higher education institution (except few religious institutions). As of 2003, however, about 37 private colleges and institutions have come into existence. As is mentioned else where, in this paper, this shows that there is significant supply side expansion. As it supply expands, however, it appears very essential to assess whether this supply boost matches with appropriated demand across the society. Studies conducted in other parts of the world indicate that the private purchase of schooling, especially of higher education, is beyond the means of many poor families. Focusing on the supply side only, this issue is not given attention in the Ethiopian context. In the following section effort will be made to focus on this issue by analyzing the cost of going to higher education institutions in comparison with average household income and expenditure.

2.2 Costs of Higher Education and Household Income and Consumption Expenditure Compared 2.2.1. Cost of Education in private higher Education institutions.

Investment in education incurs both direct (tuition fees, books and other teaching materials, and transportation) and indirect cost (foregone earnings to families and individuals). In trying to include all costs, living expense (especially for those living in different area than their residential place for the very purpose of attending colleges) should also be included. In other words, the analysis of cost of going to private higher education institutions should include all this variables. In this paper however, all explicit and implicit costs are not treated. The paper simply focuses on certain aspects of the explicit cost by focusing mainly on the direct payment made to the providers. That point made, let us see the tuition fee private colleges charge for different programs as is shown in the following table.

Table 1: Tuition Fee Charged by Private Higher Educatin Institutions

Type of Program	Maximum Yearly Payment	Minimum Yearly Payment	Regular Students' (Average Yearly Payment)	Total Average Payments
Technical and Vocational Education	3750	2432	3132.43	9372.29
and training (10+3 regular students)				
Degree program (regular students)	3700	3300	3555.6	10666.8

Source: Survey data

As the above table shows, considering the tuition fee only, on average it costs about 3132.43 Birr to complete a three years /level III- TVET program. And on average, it costs 3555.6 Birr to complete a degree program in a certain private higher education institution. When other costs such as living expense, medical expense, cost of books and other teaching materials are included, the figure changes significantly. To bring the cost of education in public institutions in perspective, the direct cost of education is more expensive in public than private institutions. According to the calculation made by the higher education system improvement task force, the amount of money spent directly for education per year that is tuition fee is 3, 687 Birr (MOE 2001). Compared with the above average figure for degree program in private institutions (about 3555.6 Birr), it means private institutions are less expensive. In the following section household income and consumption will be presented so as to make comparisons between the two.

2.2.2. Household Income and Consumption Patterns

In this section household income and expenditure will be presented. This is shown in the following table.

Table 2: Percentage Distribution of Households by Economic Variable, Categories at Country, Rural and Urban Levels.

Reporting	Categories	Economic Variables								
Level	(in Birr)	Income	Domestic Expenditure	Total Receipts	All payments					
Country	Below 2,000	22.6	8.0	20.6	6.6					
	2,000-12,599	72.1	87.8	76.6	86.4					
	12,600 or more	2.3	4.1	2.7	6.9					
Rural	Below 2,000	22.6	8.0	18.1	6.7					
	2,000-12,599	75.9	89.4	80.1	88.6					
	12,600 or more	1.5	2.6	1.8	4.8					
Urban	Below 2,000	43.0	7.4	35.5	5.7					
	2,000-12,599	49.5	79.2	56.3	74.9					
	12,600 or more	7.6	13.3	8.2	19.3					

Source: CSA, Report on the 1999/2000 Household Income, Consumption and Expenditure Survey. As the above table shows, on average 97.7 % of the households earn less than 12,600 Birr. Out of this, 72.1 percent of households earn an annual income that ranges between 2,000 and 12,599. One might argue here that the income statistics reported by households usually tends to underestimate the actual income level of households. To avoid the underestimation, as the above table shows, a total receipt of households is also presented. A look into the total receipts of households also

reinforces the above point as the total receipt of 76.6 % of households falls within a range of 2,000-12,599 Birr.

It is essential to note here that this is household rather than individual demand. With average household size of five persons (CSA 2004), it means on average five people in a given household lead their life with an annul income of about 12,600 a year which is close to 1,000 Birr (about 100 Euro) a month. Taking into account the average tuition fee in private higher institutions, it means a household needs to spend 24.8 percent of its annual income to send a single member of the household to a TVET program in a given private institution. If the student is to attend a degree program, that would require spending 28.2 percent of the household income.

Statistics on percentage expenditure of households shows that the expenditure on education is by far lower than the above percentages. On average Ethiopian households spend 1% of their income on education, entertainment and recreation and at urban level, the percentage share is about 2.5%. (See table 3 below). Even going for the urban level percentage, the maximum that the larger majority of households can spend on education is about 313.975 birr per annum. It should be noted here that the expenditure on education includes all expenditure on education from primary to tertiary level of education. It is true that primary and secondary education is free of charge in Ethiopia. But sending children to school will always involve cost ranging from educational materials to other related costs. Besides, the 313.975 Birr annual expenditure can be made on education only if all expenditure on recreation and entertainments is curtailed as the 2.5 percent reported expenditure includes recreation and entertainment. Compared to the average figure of 3132.43 Birr tuition fee for a TVET program, for instance, 313.975 Birr is too small and ends up covering only a single month payment.

Table 3: Percentage Distribution of Expenditure by Expenditure Item and Reporting Level

Expenditure Item	Reporting Level					
	Country	Rural	Urban			
Food	51.7	56.7	34.6			
Beverages	0.3	0.3	0.3			
Cigarettes and tobacco	0.4	0.5	0.3			
Foods and drinks taken away from home	0.8	0.6	1.3			
Clothing and Footwear	7.9	7.7	8.7			
Rent, fuel and power, water and construction materials	14.4	13.6	17.0			
Furniture, furnishing, and household equipment	4.0	3.4	6.0			
Medical care and health expenses	1.0	0.9	1.1			
Transportation and communications	1.6	0.9	4.2			
Recreation, entertainment and education	1.0	0.5	2.5			
Personal care and Effects	0.8	0.7	1.2			
Miscellaneous goods and services	2.2	2.5	1.4			
Household non-consumption expenditure	13.9	11.7	21.6			
Food	Country	Rural	Urban			

Source: CSA: the 1999/2000 Household Income, Consumption and Expenditure Survey

An important question to be raised here is whether there are rooms to adjust the consumption pattern. But as it can be seen from the above table, it is a difficult option. Other expenditure variables are tough competitors and reducing their percentage share of total income to increase the percentage share of expenditure on education is not a likely option. "Even if families perceive the high benefits associated with education, they may lack the disposable income necessary to cover the immediate costs. The lower income groups are affected much more than the middle-income groups. As the poor have to spend much of their income on subsistence, they often have to make difficult choices." (Patrinos 1999 Page No.).

An argument might arise here that investment made on education is not necessarily from the current year's earning as people might invest their prior saving. But the saving status of households and the population at large shows a different result. According to the 1999/2000 Household Income, consumption and expenditure Survey result, out of the total expenditure/income at country level, Ethiopian households save some 4.0 percent of their total earnings. The figure is different for urban and rural Ethiopia. In rural Ethiopia, households save 3.6 percent of the total earnings, while the saving component for urban households is 5.2 percent of their total earning (CSA 2001). With 4 percent saving rate (assuming no interest gain), a given household needs to save for more than 17 years to be able to pay tuition fee for a single member of the household.

It is very clear from the above analysis that the cost of higher education institutions is significantly beyond the reach of the average citizen. Under the current financial arrangements, the potential contributions of households are limited leading to an untapped willingness of households to pay for education.

And this would obviously raise equity issues. Even if the supply side expansion of private higher education is significant, there are serious constraints from demand side. Tertiary education is still by and large inaccessible to the majority of the poor. Studies indicate that even in the cases where problem of access is solved by public provision of tertiary education, the income background of students, the type of high school attended, etc. might have an important bearing on the success rate of students after enrolment. A recent World Bank study in Argentina proves this conclusion.

Recent household survey from Argentina illustrates that even open access tertiary education systems can be deceptive from an equity standpoint. Despite the appearance of democratic access for all secondary education graduates, academic outcomes are strongly influenced by socio economic origin. Only fifth of the students from the poorest two quintiles who enter as first year students under Argentina's open access policy actually graduate from public universities.

By contrast, there are relatively few failures among students from the richest quintile (Patrinos 1999 page No.).

The above analysis then leads to an inescapable conclusion that tertiary education is still elitist as regards access and the socio economic composition of the student body. The argument that tertiary education can offer better opportunities and life chances for low income and minority students, "there by increasing their employability, income prospect, social mobility and decreasing income inequality" (Ibid) does not hold informal.

Effort is made to see the trend in student enrolment in the past 5 years and the result shows that demand for higher education in private institutions is showing a decreasing trend (see Appendix). In some of the colleges compared in the previous years, the number of students has decreased. In others, the number of students is increasing with a decreasing trend. Though not officially reported to the Ministry of Education, there are incidents of bankruptcy and possible close down at least one or two colleges. Besides, as the number of students reported shows the enrollment rate, the statistics does not show the drop out rate. But according to information obtained from registrar offices of some of the institutions, the drop-out rate is noticeable. Of course, whether the drop-out is related to the tuition fee and if so to what extent is an issue to be seen carefully. But as there is every possible correlation, the issue should be examined through further research.

3. Demand-Side Financing Mechanisms

Needless to say, fiscal constraints prevent many especially low income-countries from relying solely on government revenues to finance desired educational expansion. That burden is shared partly by the private sector. That task is on being done well in Ethiopia except for questions of affordability. As it is shown in the following part of this paper, there exist noticeable demand side constraints in private higher education industry in the country. Considering the tuition fee only, which is but only a part of the total cost of attending college, the above analysis has clearly indicated that the private provision of tertiary education are beyond the reach of the average citizen.

This would call for some kind of remedial action to tackle the constraint. Countries around the world use different types of demand side financing mechanisms to help poor families invest on schooling. These include voucher, stipends, scholarships, support given to educational institutions and student loans.

A voucher is a payment that a public entity gives directly to students and that students use at the school of their choice. It could be a chit given to each parent, cashable only to appropriately designed institutions. The value of the chit could be equal to, or somewhat less than, per student

government expenditure in public schools (West 1996). Vouchers could be tax funded or privately funded.

In addition to those taxes funded, there exist privately funded voucher systems. To see the difference, consider first a situation where the government taxes are given industry by "X" amount of dollars and uses the proceeds to supply education vouchers. In a second scenario, the government tax does not apply. Instead the industry voluntarily donates "X" amount of dollars from its revenues to finance educational scholarships (Ibid).

Many countries in the OECD, the US and even in a number of developing countries use voucher system. A full-blown voucher scheme exists in Chile, while targeted schemes are in place in Colombia and Kenya, among other places. Studies conducted to evaluate the voucher system show that they have increased educational opportunities for the poor, and achievement results are positive for many students if not necessarily for all. Proponents claim that vouchers will make the educational system more efficient, improve quality, increase access, and enhance equity. Those who oppose such proposals focus on the poor arguing that they are not able to make the right choices and that a voucher based educational finance system will increase social stratification. For poor countries or rural areas, critics argue, the debate over the choice is irrelevant.... (Demand Side Financing Mechanisms, retrieved from the Internet date).

Student loan is another major demand side financing mechanism. Theoretically, since the private rates of returns to education are high, the budget constraints faced by students can be overcome by borrowing. Practically, however, the option is not available as is the case in Ethiopia. Even when the option for borrowing is there, the poor are still denied access owing to the existence of strong imperfections that reduce participation. "Banks do not accept the promise of future earnings as collateral. The failure of the capital market thus affects not only the lower income groups but also middle-income groups who cannot finance tertiary education without credit" (Patrinos 1999 Page No.).

Offering scholarships is another major financing technique. Experiences of many countries even in the developing world show that there are interesting results in that area. In Senegal, for instance, annual funding for the scholarships is almost \$US750,000. Half of the money is spent on those studying outside Senegal. A local government committee, on the recommendation of officials, makes allocation decisions. In Gambia, there is a scholarship scheme for girls. The Cote d'Ivoire government has introduced a program of sponsoring public students to attend private institution to help bridge some of the gaps in the supply of places in public institutions (Ibid). Though the

amount and type vary, the survey result indicates that almost all private institutions in Ethiopia offer scholarships.

Some countries have also experiences of providing direct support to institutions. A study conducted by the World Bank in Pakistan shows that private school subsidy has significantly increased enrolment by the poor and "...may also prove to be a means to leverage public funds in order to provide access to schooling at rates faster than possible with public funds alone" (Kim Jooseop *et al* 1998).

In general, it can be concluded that there are several options for demand financing in private tertiary education. There is no single option that must be used by all. The choice of the options depends on the specific country and situation under consideration.

4. Conclusions and Recommendations.

Constituting 75 % of business and computer science graduates, and nearly half percent of law graduates, needless to say, private providers play a critical role in the higher education development strategy of the country. The 40 percent or so growth of the private sector involvement in higher education is so remarkable that policy makers and researchers have focused on the supply side boost ignoring constraints from demand side.

This paper has made it clear, however, that not all groups in society can afford the direct and indirect costs associated with investing in education. The findings of this paper show that for the majority of households, the average household income and receipt is too small to invest on higher education for members of the family. The existing expenditure pattern also shows that the percentage share of education from total household expenditure is too small to cover even the tuition fees of the private providers. The saving rate is also too small that much cannot be expected from that angle.

This would basically means that even if the growing private investment would offer more opportunity for students that are unable to join public universities and colleges, the investment to be made is taking away that opportunity from them. In the case of Ethiopia, except for the high-income groups that constitute a tiny minority of the total households, in general terms even the tuition fee is not affordable.

Education in general and higher education in particular is a very productive investment. The survey of the literature review reveals that both social and private returns to education are significant. The 1995 estimate for Ethiopia shows that the private and public rates of return to education respectively are 27 % and 12 %. How ever, as education is a lifetime investment, the

benefits can only be realized in the future while the costs are immediate. Since the benefits of education accrue not only to its direct recipients, but also to society at large, there is a clear need for intervention to rectify problems of under investment in education.

Unless some remedial actions are sought, the demand side constraints would not only exacerbate the existing inequality but would also impose serious limitations even on the supply side expansion as demand is already exhibiting declining trend. This then calls for some sort of intervention from the government and other stakeholders. In light of this, the following recommendations are forwarded.

There is a need for state intervention: with the above analysis in mind, the existing demand side problems in the private higher education industry requires introduction of major intervention packages from the government side. Patrinos points out.

When private demand for schooling is lower than optimal, along with the other market failure arguments, a role for public intervention may be justified. However, it does not necessarily follow that the public sector role is provision. It may not even be finance. Changes in regulations or incentives could be all that is needed. Sometimes simply providing more information so that optimal decisions can be made will be sufficient. Nevertheless, the state in most countries is the major financier of education. (Patrinos 1999 Page No.).

This intervention might range from direct subsidies through other supports to student loans. The following are possible areas of consideration.

A) Public funding of students going to private colleges is one area of possible intervention. This might take a form of direct subsidy for private institutions that admit poor students as is seen from experiences of other countries. A possible argument to be raised here is whether this recommendation is viable with the already existing constraints of public finance. As is shown in Section 2.2.2 of this paper, from purely cost point of view it is less expensive to send a certain student to a private than public institutions. A student needs about 3, 687 Birr to attend a degree program in the field of business and economics in a public university while the average cost for the same program in private providers is only 355.6 Birr. Though this is something to be explored more, the private and public returns to invest in both institutions are similar. This kind of intervention might be launched gradually by focusing on the very needy. It might, for instance, take a form of scholarships for rural girls and/or for students coming from the very poor family that are unable to pay for their education but have good performance in high school and preparatory studies. This option has a good number of benefits. "If education was provided under market

- conditions, only those who could afford to pay tuition fees could enrol. Not only would there be under investment form the social point of view, but also income inequalities would be preserved from one generation to the next since education is itself a determinant of lifetime income" (Ibid).
- B) Provide loans to students going to private institutions. Under the recently launched costsharing scheme in public institutions, students that cannot pay their share of the cost at the
 outset are provided with loan facilities and pay their share of the cost as "graduate tax"
 with a payment period that extends upto 15 years after graduation. Those going to formal
 employment to both public and private firms will pay back their loan from their salary
 according to the terms of agreement they enter into with Ministry of Education. But the
 loan administration has a clear problem when it comes to self-employed students. It is not
 clear how the loan repayment is administered in the case of self-employed graduates.
 (World Bank 2003). As the loan repayment can be administered with similar manner, a
 mechanism can be created, because there is no logical ground to exclude students going to
 private higher education isntitutions. Except for those self employed, the loan repayment
 can be administered with similar manner. The contract of agreement may not be between
 Ministry of Education and the students but between banks and students or any other organ
 established for that purpose.
- C) Other financing mechanisms should also be sought. As it is mentioned above, except some of the extension students whose tuition fee is paid by employers, the channelling of funds through other funding sources is negligible. It is only a single college that has reported to have students sponsored by different organizations other than parents and employers. As human capital development is a priority area, all stakeholders should have a role in this regard. For instance, different local and international NGOs can allocate a certain amount of money for that purpose. Besides, some sort of funding agency can be established. Support given by different individuals such as Ethiopians living abroad could be channelled through this fund.
- D) Investment made by parents can be increased significantly by encouraging special saving for children's education starting from the early age of the child. This is poorly practiced currently. Banks should provide special incentives to encourage lifetime saving.
- E) The type and number of scholarships might vary, but almost all respondents reported as giving scholarships. This is a trend to be encouraged. The government can indirectly encourage this by providing other supports to minimize the cost of operation for the colleges. One such support could be making practical the import tax exemptions private

- tertiary institutions are entitled to the importation of instructional materials and providing loan facilities, which are non-existent now (World Bank 2003).
- F) As it is indicated elsewhere in this paper, the tuition fee charged by private tertiary institutions is not affordable. Though this is an issue to be examined through further research, whether the tuition fee charged by private institutions is reasonable or exaggerated, is another area of consideration. Considering the fact that public institutions are more expensive than the private ones and that tuition fee is more or less similar in the majority of the private institutions, this might be highly unlikely but it should be examined. In the case of TVET program, the number of hours students have to take is too many by any standard and this would reflect on the cost. The Ministry of Education needs to consider major revision in this regard.

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Appendix 1: Number of Students in Different Colleges

College A

Department	1996	1995	1994	1993	1992	1991	Trend
Accounting	2191	1033	677	282	86	-	Increasing
SSOM	1051	294	237	41	-	-	Increasing
Purchasing & Supplies	190	59	166	66	30	-	Up and down
Management							
Marketing	972	662	656	191	64	-	Increasing with decreasing trend
General management	1163	179	184	56	20	-	Increasing
Import & Export Mgt	34	9	81	40	-	-	Decreasing
Transport Mgt	59	17	91	30	-	-	Up & down
Computer Science	764	272	214		-	-	Increasing

College B

Department	1996	1995	1994	1993	1992	1991	Trend
Accounting	-	91	84	-	-	-	Increasing with decreasing trend
SSOM	-	57	61				Decreasing
Computer Science	-	326	206	-	-	-	Increasing with decreasing trend
Computer	-	146	104	-	-	-	Increasing with decreasing trend
Maintenance							
IT + Business	290	-	-	-	-	-	-

College C

Department	1996	1995	1994	1993	1992	1991	Trend
Accounting	71	84		-	-	-	Decreasing
SSOM	32	42	-	-	-	-	Decreasing
Computer Science	111	125	-	-	-	-	Decreasing
Marketing	52	65	-	-	-	-	Decreasing
Law	32	40	-	-	-	-	Decreasing

College D

Department	1996	1995	1994	1993	1992	1991	Trend
Accounting	555	916	400	206	279	25	Increasing then decreasing
SSOM	487	587	184	79	77	_	Increasing then decreasing
Computer Science	505	284	101	-	-	-	Increasing
Marketing Mgt	523	357	118	50	25	8	Increasing
Law	282	262	86	33	16	8	Increasing with decreasing
							trend

College E

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Department	1996	1995	1994	1993	1992	1991	Trend
Accounting	847	457	239	-	-	-	Increasing
SSOM	234	58	25	-	-	-	Increasing
MIS	162	-	-	-	-	-	Increasing
Management	171	54	26	-	-	-	Increasing
Marketing	420	56	-	-	-	-	Increasing