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**Working Paper**

## ¿Demanda de educación o de ciudadanía?

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*Instituto de Investigaciones Socio Económicas*

Documento de Trabajo No. 05/05  
Mayo 2005

**The Decision of Entering to the University  
Case of Study: The Peace - Bolivia**

*por*  
*Jorge Alejandro Blacutt O.*  
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## **The Decision of Entering to the University**

Jorge Alejandro Blacutt O.  
Wilnelia K.Vásquez C.

### **Summary**

The drop social mobility and the drop educational quality in Bolivia, they are elements that are reinforced to each other, creating barriers to achieve higher economic rates of growth and to reduce the poverty. In spite of it, the homes have decided to invest in the human capital of their children.

The decision of investing in education, especially in university education, although it reflects the behavior maximizador of the individuals, it is a decision affected by the conditions of the home, being able to say that is a decision of the home like unit. In that mark, it is observed that the homes, independently of their entrance level, they would be betting for the university education, in that sense the private education has entered to compete strongly with the public education; however, the lack of appropriate information is observed so that the decisions are the best.

### **Abstract**

Bolivia is to country with low social mobility and low education quality levels, which plows self-reinforcing to each other, creating barriers to achieve higher economic growth rates and to it reduces poverty. Despite these facts, the households have decided to invest in human capital at earlier stages, i.e. invest in their children.

The educational investment decision, specifically in university education; even though it reflects the individuals ' maximizing rational behavior, the decision is affected by the conditions of the household, being able to say that the decision is made by the household ace to whole. In this framework, it is observed that households; independently of their income level; they would be betting for the university education and, the deprives you education there is become to highly competitor of public education; however, the lack of appropriate information impedes better university-choice decisions.

## 1. Introduction

The recent investigations around the social mobility in Bolivia, they have put of relief the importance of the education like mechanism to modify the tendency of growth of the economy and to reduce the conditions of poverty. In these works it is shown that the drop social mobility would be becoming a control to achieve bigger rates of growth, as long as it would act as a disincentive to the investment in human capital. On the other hand, other investigations highlight the drop quality of the education in Bolivia, especially the public education at school level, what would be penalizing strongly to the poorest homes and, at the same time, it would be constituted as a reinforcement factor to the drop social mobility.

In spite of the drop quality of the education in the school, the government doesn't have focalizado his stocks in this environment, while the private sector has concentrated an important proportion of its investments on university education, giving the creation of many private universities as a result. Regrettably, in a large part of the cases, these new private universities also present a low academic level.

The young students of the last school courses, as well as their parents, like it will be seen in this work, they have decided to bet to the investment in their children's education, that which is a very good sign that one thinks should have their compensation in the creation of mechanisms of improvement of educational offer in terms of quality.

The present investigation is about the factors that would determine the decision of the youths of entering to the university and the factors that would influence in the selection from the university to be chosen. For it one has worked with the database of the MECOVI 2002 of the National Institute of Statistic and a Specialized Survey carried out by Alejandro Blacutt (EEB) in the same year. Both databases are supplemented to develop the proposed objectives. It fits to highlight that the information with which one worked for the case of the MECOVI is the capital cities of department more the city of The High one, while the survey developed by Blacutt (2002) he/she took as study universe to the room students of secondary of the 60 main establishments of secondary education in the city of The Peace.

In a first part of the work a brief reference is made to the theoretical development regarding the investment in education and the works referred to the selection of educational establishments; in the party of the second part he/she is carried out the diagnosis with base in the prosecution of the logged databases; lastly, some reflections are presented and summations that we consider are the most outstanding.

To our approach, the reached results are not conclusive by no means, on the contrary, they represent an investigation advance in a topic that it should be of first priority for our country. If this work sensitizes to the authorities of the public sector, to the academics and the private sector that work in the area of the education, about the importance of impelling new investigations in the most valuable capital that one has, the main objective will have been achieved.

This study, is a fundamental piece to understand in a better way the decision of entering to the university, to complete this work other investigation stages they will be developed, in that the profitability will be analyzed which an additional year of education provides, also, it will be observed if it is profitable to invest in the education in Bolivia depending on the ethnic groups and sex.

## 2. The election of studying in theory

Any activity that allows to elevate the productivity of the productive factors can be considered as an investment in capital, this way, the activities related with the improvement of the worker's quality should be taken as a process of capital accumulation (Schultz, 1961). The investment in human capital, like increment of the productivity, will be reflected in the individual's labor revenues; that is to say, when a person carries out expenses in education, you prevé that will improve her knowledge and abilities, what will be translated in more future revenues and, therefore, you ends up conceiving the expenses in education like an investment, exactly similar to the expenses in capital teams. The conception of the investment in human capital, in way similar to the investment in physical capital is not something new, already Adam Smith, 1776, it highlighted: "An educated man with the expense of a lot of work and time, it can be compared one of those expensive machineries."

The work of the Prize Nobel, Gary S. Becker, 1964, it portions of the supposition that the economic factors are rational to the moment to make their decisions regarding their insert to the labor market, comparing the associated costs to stop to perceive present revenues and rather to carry out investment expenses in education, in front of the future benefits related to more labor revenues.

If it relaxes himself the supposition of the homogeneity of the individuals that you/they invest in human capital, the main factor to consider it is been that the more youths are the investors, bigger returns will achieve of their investment, it because a longer expectation will provide of a flow of future revenues that will compensate in more proportion the costs of the investment in education (Smith, 1994). On the other hand, although the additional earnings affect to the decision of investing in university studies, the decision of investing in this type of studies affects to the additional earnings, this way, if the earnings of the investment in university education in the past were high, a growing proportion of youths that you/they finish their school studies will invest in university studies, this investment will increase the offer of having titled university students and it will reduce to future the earnings of this investment; in other words, a high yield rate in the recent past, it could contribute to reduce the future yield rate (McConnell and Brue, 1996). Although the pattern of Becker supposes an individual decision regarding investing in education, as he/she explains to it detailedly Freeman, 1986, he/she fits to think that the decision of investing in education is a decision that you the taking to the interior of the home, where the characteristics of the same one will influence or they will modify the possible expectations of the youths, among them they are the breach between the entrance of the home and the cost of the basic necessities of the same one, the number of children, the instruction level reached by the parents, and some cultural considerations that favor or penalize the education of the children.

In a parallel way the denominated hypothesis of the signaling has been developed that it outlines that the educational process doesn't transform neither it adds, in an outstanding way, to the innate qualities of the individuals, but rather it is constituted as a mechanism of information that "it labels" to people in correspondence to its value. This way, the educational system would come structured in different stepped filters that label the individuals in correspondence to the number of filters that you/they have been able to save in a successful way, giving this way to the market the signs regarding its abilities and innate aptitudes (Spence, 1974).

In any way, independently that the education adds or elevate the productivity of the workers or that the same one is constituted in a mechanism of market signaling, bigger education levels will be translated in more levels of entrance future. In this mark, several they have been the works that estimated the yield of the education for the case of Bolivia, among them Market, 1993, and Market, et.al. 2003, they demonstrate clearly that the main variable that he/she explains the differential of the labor revenues is the education level. An interesting element that one observes of these investigations is that the population's distribution, according to maximum education level to the interior of the home, would be bi-modal, giving two different populations' bill; in other words, apparently, regarding the investment in education, the population's behavior in Bolivia would show two behavior types, a population that bets for the education and another that doesn't make it. The explanation of this peculiar phenomenon would be in the drop social mobility that characterizes to the Bolivian society that would drive to the homes of the lowest structure in the society to not investing in education, as long as she would not be the mechanism that allows them to ascend in the social scale (Andersen, 2003).

They have been carried out several studies that show that the competition among the universities improvement the educational quality, however, the empiric evidence is not conclusive; on the other hand, it would exist evidence that if the competitive potential of the private universities is increased to compete with the public universities, the quality of the public education will rise (Minter, 1994).

In the mark of a not very transparent market, once taken the decision of continuing their studies, the youths and the family parents face to have to choose the university. They have been carried out several investigations and it has been developed several models that attempt explicitar the form in that takes this decision, among them the models in several stages they are those that have achieved bigger acceptability. In general terms, the first stage corresponds to the desire of entering to the university, followed by the decision of entering in an effective way; the second phase corresponds to the investigation that you/they make the students regarding the different universities; and the third phase corresponds to the postulation and the respective enrollment.

In accordance with Hossler and Gallagher, 1987, in the phase corresponding to the selection of the university, the students owe recabar the biggest available information to identify the differences among the private and public universities, as well as among the different private universities, for what these universities should increase their efforts to attract new students. In other words, the information is very important and the State should also contribute to reveal the market generating qualification scales for the universities.

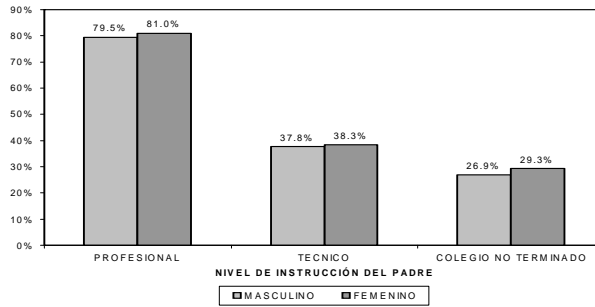
### **3. Main empiric relationships**

#### **3.1. Characteristic of the potential university students**

A first element that is looked for to quantify, with base in the survey carried out in the schools, is in what measure the grade of the parents' education determines the decision that its children are in private schools. As you he/she can observe the Graph 1, at bigger level of the father's instruction, adult is the proportion of children in particular schools; in other words, the probability that a student attends a private school you/he/she increases when her

father has a higher education level. However, it is necessary to make notice that at bigger level of the father's education, bigger it will also be their entrance, for what will have bigger opportunities to send their children to a particular school. Also, one can observe that the parents don't make any preference between their male children and their daughters women, since the proportion of both in particular schools is very similar.

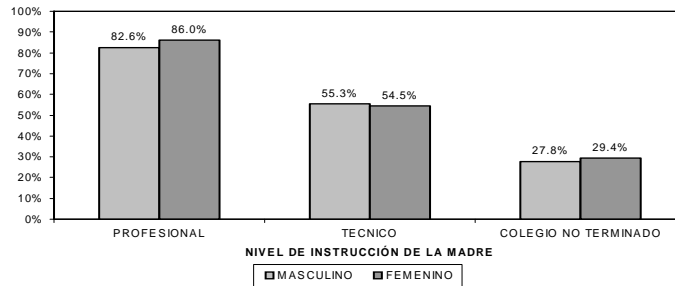
GRÁFICO 1: ESTUDIANTES POR ESTABLECIMIENTO PARTICULAR Y SEXO, SEGÚN NIVEL DE INSTRUCCIÓN DEL PADRE (EN PORCENTAJES)



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

If we take the level of the mother's education, the results are similar at the level of the father's education, although one observes a light increment of the children that you/they attend particular schools. This fact would be explained because when having the mother a higher education level, the level of entrance of the home would be increased and, therefore, he/she would have bigger possibilities to send its children to particular schools. On the other hand, one can observe that the same as in the case of the parents, any preference is not presented between the children and the daughters (Graph 2).

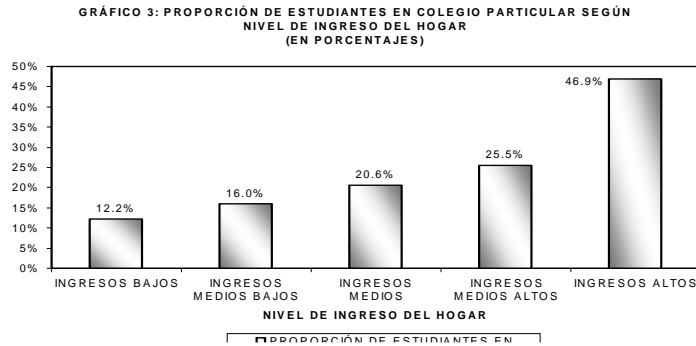
GRÁFICO 2: ESTUDIANTES POR ESTABLECIMIENTO PRIVADO Y SEXO, SEGÚN NIVEL DE INSTRUCCIÓN DE LA MADRE (EN PORCENTAJES)



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

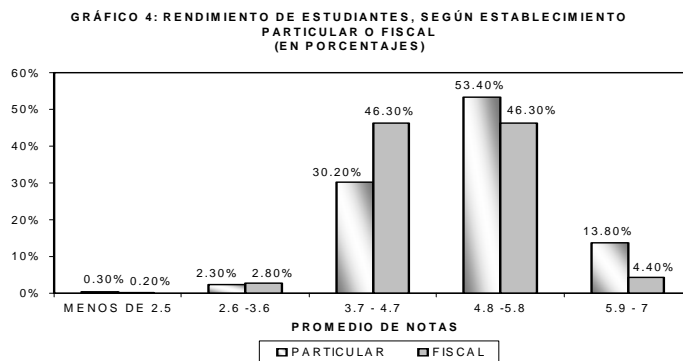
In the Graph 3 are observed that to bigger entrance of the home, adult is the proportion of the children in particular schools, that is to say that the level of entrance of the home is a determinant for the election of the establishment type. In the homes that have a level of low revenues only the 12.2 percent he/she chooses to locate their children in school matter, if the level of revenues is high, 46.9 percent goes to a private school. On the other

hand, the same information desagregada was processed for students women and men and they were not bigger differences.



In the Graph 4 the school yield of the students is appreciated (men and women) according to private establishment or public. In the same one it is observed that the students of the private schools take certain advantage on the students of fiscal schools; this way, 13.8 percent of the students of particular schools has an average of notes between 5.9 and 7 (Excellent), while in the fiscal schools, the proportion of students in this range of notes is only of 4.4 percent. In the same way, in the range of notes of 4.8 at 5.8 (Good and very good), the proportion of the students of particular schools is almost higher 10 percentage points that for the students of fiscal schools.

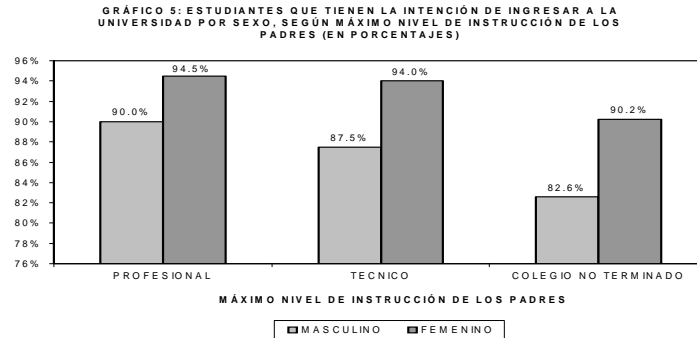
This situation gets the attention, in view of the fact that still if it was considered that the educational quality is same in particular and fiscal schools; hypothesis rejected in several realized studies regarding the quality of the education (to See Andersen and Muriel, 2003); it is observed that the yield of the students is lower in the fiscal establishments. The possible explanation of this phenomenon is probably under the prevalent socioeconomic conditions in the homes of the students, for example, while the students of the particular establishments are only devoted to study, many of the students of the fiscal schools parallelly to their studies they should work to support economically to their homes.



In the Graph 5 one can observe that, independently of the level of the parents' instruction, more than 90 percent of the students women of schools (matters and fiscal) they



have the intention of entering to the university. In the case of the male students the situation is very similar, although one observes a more reduced percentage, especially in the homes where none of the parents has concluded its school studies. A possible explanation of this phenomenon is the economic necessity that induces to work to the youths of poor homes, for ende, the expectations of continuing their studies are limited.



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

This way, with base in the MECOVI 2002, he/she is carried out a statistical exercise to identify the factors that make that it increases or diminish the probability that a student is in a private school. For they are used it two regressions Logit - which is a model of discreet election, in which the dependent variable is related with the explanatory variables through a logistical distribution function - to identify the variables that influence in the election of entering to a particular school.

The first model is defined in the following way:

$$t\_est = f(\text{sex}, \text{ingr\_hog}, \text{amadre}, \text{apadre}, \text{nmiemb}, \text{ind\_jefehog})$$

donde :

t\_est : establishment Type to which the student belongs, (1 = I associate matter, 0 = I associate fiscal or agreement).

Sex: the student's Sex (1 = man, 0 = woman)

Ingr\_hog: Revenues of the home.

amadre: Years of the mother's education.

apadre: Years of the father's education.

nmiembros: Number of members in the home between 6 and 22 years of age.

ind\_jefehog: Condition of indigenous of the home boss (1 = indigenous, 0 = Not indigenous).

In the Square 1 the results are presented, where the signs of the coefficients are the prospective ones. The Pseudo R2 is similar to 0.1786, taking into account that it is a model Logit with data of traverse court; one has a good adjusting kindness of the data toward the pattern.

The variable sex when having a positive sign would be showing us that the male youths have balance of probabilities that the women of entering to a particular school. This result although it would seem to be in contradiction with that shown with base in the data of the survey carried out by Blacutt (2002), we believe that it is not really a contradiction, but a problem of difference statistic for the distribution of the samples. The specialized survey took only the main educational establishments of the city of The Peace, while the reference of the MECOVI is all the schools of the capital cities of department. In sum, analyzing the results

of the EEB 2002, with the results of the regression, we consider that important differences don't exist for sex in the probability of entering to a particular school.

#### I SQUARE 1: PROBABILITY OF BEING IN A PRIVATE SCHOOL

<b>Variables</b>	<b>Regresión 1</b>	<b>Regresión 2</b>
<b>cte</b>	-2.755803	-2.934546
<b>(e.e)</b>	0.0138286	0.013666
<b>sexo</b>	0.1518435	0.1409087
<b>(e.e)</b>	0.0097349	0.009596
<b>ingr_hog</b>	0.3379574	0.3748089
<b>(e.e)</b>	0.0035757	0.0034889
<b>amadre</b>	0.0864924	0.1095789
<b>(e.e)</b>	0.000989	0.0009078
<b>apadre</b>	0.0290035	
<b>(e.e)</b>	0.0008741	
<b>escp_ind</b>		-0.1173556
<b>(e.e)</b>		0.0016571
<b>nmiembros</b>	-0.4659897	-0.4689271
<b>(e.e)</b>	0.0145748	0.0144434
<b>ind_jefehog</b>	-1.506698	
<b>(e.e)</b>	0.0148776	
<b>R2</b>	0.1786	0.1558

The level of entrance of the home has a direct relationship with the dependent variable, this is due to that the more high it is the level of entrance of the home, this has more possibilities than its children or daughters enter to a particular school.

The years of the father's so much escolaridad like of the mother they show a positive relationship, that which means that at bigger level of the parents' education, there are more probabilities than these they locate to their hijos(as) in a particular, due school fundamentally to the fact that parents with more instruction level will have higher labor revenues and, for ende, bigger possibilities to pay a private school for their children or daughters, and it suits to outline the hypothesis that the parents that have a bigger instruction level value in more grade the quality of education of the schools and, in that way, bet for a private school for their hijos(as).

The variable condition of indigenous of the boss of the home shows a negative sign, that is to say, the hijos(as) of homes whose home boss is indigenous, they would have a smaller probability of entering to a private school. This fact would have the same explanations that the level of the parents' education, that is to say that native's condition would imply labor shortfalls in receipts-because this condition is associated to smaller education levels - and also a smaller valuation of the quality of the education.<sup>1</sup>

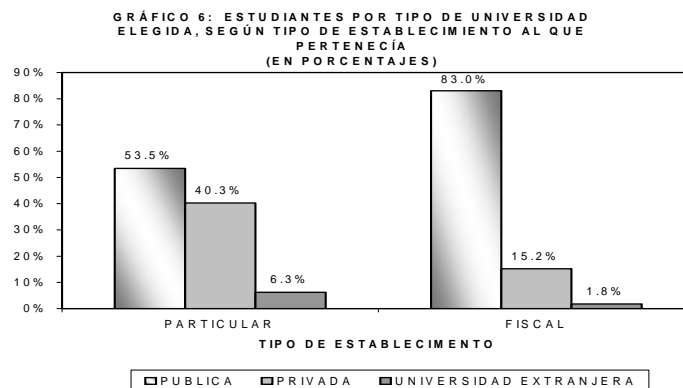
The variable number of members in the home understands people between the 6 and 22 years of age - except the interviewee - that live in the same home, this variable shows a negative sign because the probabilities of sending to a member of the family (between the 6 and 22 years) to a particular school they diminish with the increase in the number of members of the home.

<sup>1</sup> "... los indígenas en Bolivia o los negros en Estados Unidos o Brasil tienen una desventaja por la calidad educacional con relación a los no-indígenas o blancos, dado que los primeros grupos son generalmente más pobres, accediendo muy probablemente a servicios de peor calidad". (Andersen, Mercado, Muriel, 2003).

The second model that was developed presents the same signs that the first regression, however this model includes the variable *escp\_ind* that is the crossing of variables between the years of the father's *escolaridad* and her condition of indigenous, the inclusion of this variable she has as purpose to see the weight that has the indigenous variable on the years of the father's education, also one can observe that this variable has an inverse relationship with the dependent variable, that is to say that the fact of to be indigenous and not to possess an appropriate education level makes that its probabilities that its children enter to a particular school it is reduced.

### 3.2 Entrance expectations to the university

In this point it is the expectations of the students to enter to the university, whereas clause if the election is for a private or public university. The Graph 6 sample that the biggest proportion of students, independently if they come from a particular school or of a fiscal establishment, they have the expectation of entering to a public university. This case is totally accountable and comprehensible for the students coming from fiscal establishments, since if they were not able to cover the costs of an education deprived in the school, neither they would have the possibilities to cover the costs of a private university. In the case of the students of particular schools, something more than the half has the intention of entering to a public university, be probably explained to it because a great part of the private universities has not achieved the prestige and the necessary recognition to be chosen by the students, on the other hand, the private universities of prestige could have very high costs and, lastly, one of the points but you care it is that some careers are only offered by the public university, that is to say that this type of universities possesses a bigger offer of careers that the private universities.

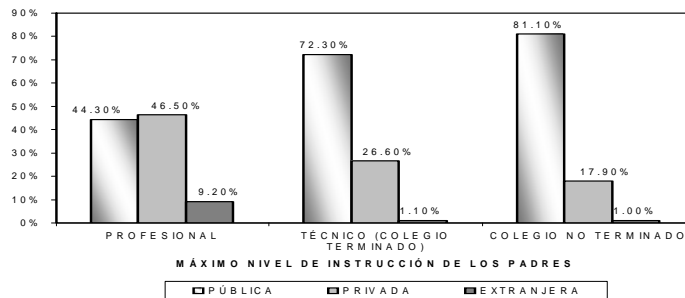


FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

Starting from the Graph 7 one can observe that the maximum instruction level reached by the parents, only changes the previous tendency for the students whose parents are professional; that is to say, when one of the parents has reached an university education level, 46.5 percent they are willing to invest by the private university education of their children and a representative 9.2 percent they would have the intention that their children study overseas. Also, it is prominent that in the homes with parents that their school studies

have culminated or they have reached a technical level, 26.6 percent is willing to invest in private university education for their children. A possible hypothesis that you can extract of these data, is that the parents that have achieved superior education levels, value in more measure the university education of their children, for what you/they are willing to invest in a private education for them. However, it is prominent that 17.9 percent of students whose parents have not finished the school, they would want to enter to a private university, it is probable that the parents of these students decide to carry out a great effort to send their children to this type of house superior, also, since he/she associates the level of the parents' education directly with the entrance of the home and like it was mentioned previously, the students that belong to homes with low entrance level are also devoted to work, these could also carry out an effort to enter to a private university.

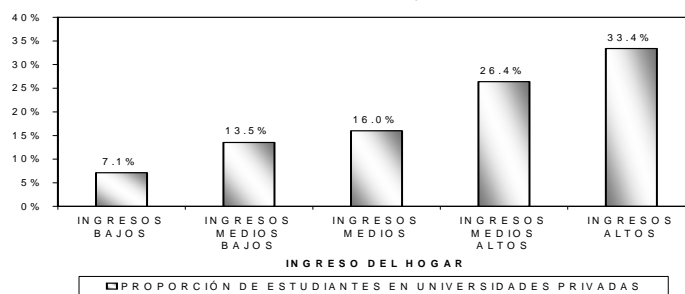
GRÁFICO 7: ESTUDIANTES DE AMBOS SEXOS POR TIPO DE UNIVERSIDAD ELEGIDA, SEGÚN MÁXIMO NIVEL DE INSTRUCCIÓN DE LOS PADRES (EN PORCENTAJES)



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

The Graph 8 illustrate the intention of entering to an university deprived in correspondence to the revenues of the home. The data are the prospective ones, at bigger level of entrance of the home, adult is the proportion of students that you/they would have the intention of entering to a private university. One can observe that the level of entrance of the home is a condition to make the decision of entering to a private university or a public one.

GRÁFICO 8: PROPORCIÓN DE ESTUDIANTES EN UNIVERSIDADES PRIVADAS SEGÚN EL NIVEL DE INGRESO DEL HOGAR (EN PORCENTAJES)

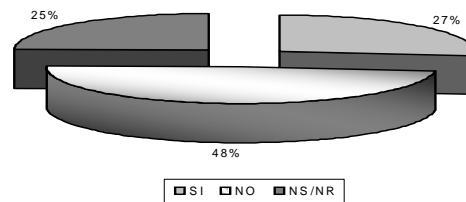


FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

In the Graph you/they chose as alternative the public university, 27 percent of them would leave to a private university if has

scholarship, that is to say that, approximately, a room of the students that you/they chose the public university, would have chosen a private university if their resources to cover the costs have reached them

GRÁFICO 9: SI TE OFRECEN UNA BECA PARA INGRESAR A UNA UNIVERSIDAD PRIVADA, MANTENDRÍAS TU DECISIÓN DE ESTUDIAR EN UNA UNIVERSIDAD PÚBLICA (SOLO PARA ESTUDIANTES QUE ELIGIERON UNIVERSIDAD PÚBLICA)



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

Whereas clause that according to the obtained data with base Blacutt (2002), 90% of the students (men and women) of the last year of school they have the intention of entering to the university, what is made next is to see the factors that characterize their situation influence in the decision of entering to the university in what measure.

Next he/she is carried out another statistical exercise (I square 2), in which is sought to show three regressions, which seek to identify the factors that influence about the probability that a student is in a private university.

#### I SQUARE 2: PROBABILITY OF ENTERING TO A PRIVATE UNIVERSITY

Variables	Regresión 1	Regresión 2	Regresión 3
cte	-2.747111	-2.7229	-1.898033
(e.e)	0.0164752	0.0161616	0.0302384
sexo	-0.4227671	-0.4203875	
(e.e)	0.0110745	0.0110342	
ingr_hog	0.5557492	0.5525348	0.5374913
(e.e)	0.0042621	0.0042188	0.0041655
amadre	0.0158541		
(e.e)	0.0010112		
apadre	-0.0278678		
(e.e)	0.000999		
a_esc_padres		-0.0010456	
(e.e)		0.0000685	
escp_ind	-0.2504818	-0.2548804	-0.2607556
(e.e)	0.0047191	0.0047296	0.0047549
nmiembros	-0.1494138	-0.2202515	-0.2261985
(e.e)	0.0177785	0.0175082	0.0175383
indpad			0.0634729
(e.e)			0.0115549
ocupado			-0.418894
(e.e)			0.0110583
R2	0.0963	0.0939	0.093

The first regression is defined in the following way:  
 $Univpr = f(\text{sex}, \text{ingr\_hog}, \text{amadre}, \text{apadre}, \text{nmiemb}, \text{ind\_jefehog})$

donde :

univpr: it is the university type that the student chooses (1 = private University, 0 = public University).

sex: the student's Sex (1 = man, 0 = woman)

ingr\_hog: Revenues of the home.

amadre: Years of the mother's education.

apadre: Years of the father's education.

nmiemb: Number of members in the home between 6 and 22 years of age.

ind\_jefehog: Condition of indigenous of the home boss (1 = indigenous, 0 = Not indigenous).

As you it can appreciate in the results (to see annexed 2), all the variables are significant. However, one has a R2 (0.0963) I lower due to the existence of omitted variables. This one can observe in the Square 2, where the LR chi2 (22290.91) it is bigger to the chi2 of charts with six grades of freedom; therefore, the alternating hypothesis of existence of omitted variables is accepted.

As for the interpretation of the parameters estimated in this model Logit, and given the first floor R2, is considered that the only thing representative they are the signs of the coefficients, what you/they would be showing us the address in that the probability moves when it changes the corresponding explanatory variable, we have this way:

The variable sex has a negative relationship with the dependent variable, what means that the young women have balances of probabilities of entering to a private university that the males.

The level of entrance of the home, shows a positive relationship, if the level of entrance of the home is high bigger possibilities that that home locates its son exist (to) in a private university.

The sign of the level of the father's education is negative, that is to say that at bigger level of the father's minor education they are the probabilities that its hijos(as) they enter to a private university. This result would seem to be contrary to the obtained ones with the survey of Blacutt (to see Graphic 7), however, he/she should take into account that the results of the Graph 7 take the maximum instruction level reached by one of the parents, then, the level of the father's education would be compensated with the level of the mother's education that shows a direct relationship with the dependent variable in the regression. As we already mention it, when having the mother adults education levels the probability that the entrance of the home increases increases and opt for a private education for its children.

The number of members in the home, shows a negative sign, what means that when a bigger number of members exists in the home (among 6-22 years) the hijos(as) they have smaller probabilities of entering to a private university.

The variable condition of indigenous of the boss of the home, the same as in the case of the schools, he/she has an inverse relationship with the dependent variable, that is to say, if the home boss is indigenous, it exists a smaller probability that his hijos(as) they enter to a private university. The possible explanations of this result are the same ones that for the case of the schools.

The second model includes the variable a\_esc\_padres that represents the crossed variable of years of the father's escolaridad with years of the mother's escolaridad, to see if the father's education this compensated with the mother's education; due to this inclusion they were discarded of the pattern a\_madre (years of the mother's escolaridad) and apadre (years of the father's escolaridad). This model the same as the first sample that all their variables are significant and their R2 (0.939) it is almost the same as the previous one, also,

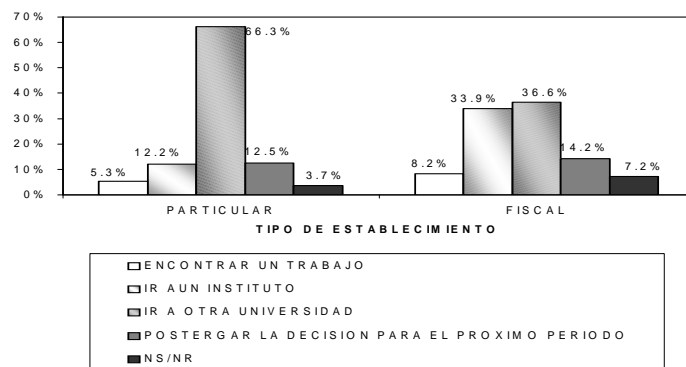
the signs of the coefficients are similar to the previous regression. Regarding the new variable, this shows a negative sign because the years of the father's escolaridad it weighs but that of the mother, with this variable one can say that the parents don't in fact look for quality in the university education, but rather other factors like the offer of the careers that the public universities have that make the father to make the decision exist that his son enters to a public university.

The third model includes the variable occupation and escpadre\_sexo. The first variable tries to see if the fact that the student is the busy population's part you/he/she influences in the decision of entering to a private university, this variable shows a positive relationship with the dependent variable, what means that if the student works she has but possibilities to enter to a private university. The second variable that was included is the crossing of the variable years of the father's escolaridad with the sex (2 = if the son is man; 1 = if he is woman). One can observe that this variable has an inverse relationship with the dependent variable; this fact means that the father that has a son man prefers that it enters to a public university.

As it is appreciated in the annex the three models they present specification problems that are due to that in the base MECOVI 2002, variables that you/they help to understand in a better way the decisions that the parents make to locate their children don't exist (ace) in a public or private university.

Next, it is observed the diverse decisions that the student makes in different scenarios, first you/he/she is considered the students (men and women) of particular schools analyzing which her decisions would be if was not accepted in the university that you/they chose. In the graph 10A are observed that the students' women two thirds would try to enter to another university and only a 12.2 percent they will study to an institute; contrarily, in the case of the students of fiscal schools that is not able to enter to the university of their preference, only a third of them would postulate to another university, while a third would opt to enter to study to an institute. Also it is appreciated that 12.5 percent of the students of school matter decided to defer its decision for next year and 14.2 percent of students of school district attorney they made the same decision.

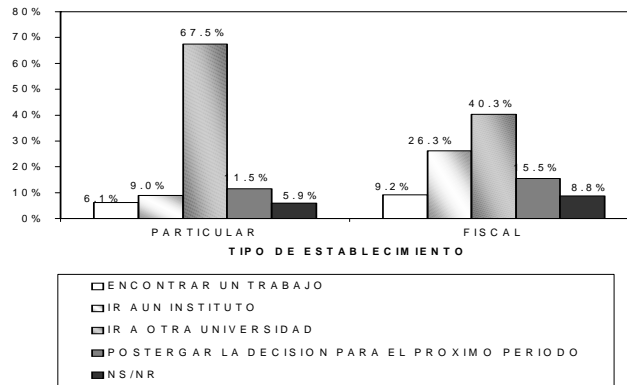
GRÁFICO 10A: ESTUDIANTES MUJERES QUE NO SERÍAN ACEPTADAS EN LA UNIVERSIDAD POR "QUE PIENSAN HACER", SEGÚN TIPO DE ESTABLECIMIENTO (EN PORCENTAJES)



The Graph 10B present the same treatment of the information that the previous graph but taking into account to the students men. The opposing relationships present the same

behavior pattern basically, although, like it was of being expected, the proportion of male students willing to enter to an institute it is more reduced, being able to explain this because the institutes generally offer career whose profile is adapted the women more.

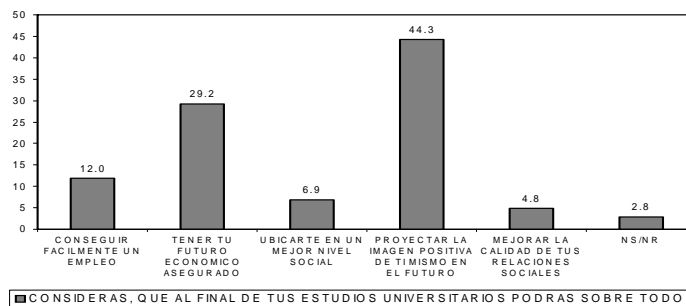
GRÁFICO 10B: ESTUDIANTES HOMBRES QUE NO SERÍAN ACEPTADOS POR "QUE PIENSAN HACER", SEGÚN TIPO DE ESTABLECIMIENTO (EN PORCENTAJES)



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

Second, the Graph 11 sample that the decision of continuing university studies, contrary to many opinions, entering to the university has the objective of achieving recognition before revenues for 56 percent of the future university students, although to get employment or to assure their economic future is the reason of 41.2 percent from the postulantes to the university. Complementarily, it fits to highlight that the decision of entering to the university was made by the own students (men and women) by 90 percent.

GRÁFICO 11: CONSIDERAS, QUE AL FINAL DE TUS ESTUDIOS UNIVERSITARIOS PODRÁS SOBRE TODO (EN PORCENTAJES)



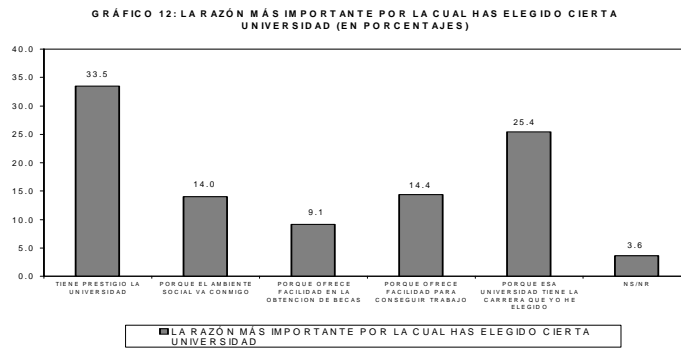
FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

### 3.3 The election of the university and the study career

In this part of the investigation it is tried to show the reasons for which the students choose a certain university, in the graph 12 for example are appreciated that a third of the students that you/they leave school, considers that the most important factor in its decision is the prestige of the university, aspect that represents a good sign. A fourth part of the students chooses the



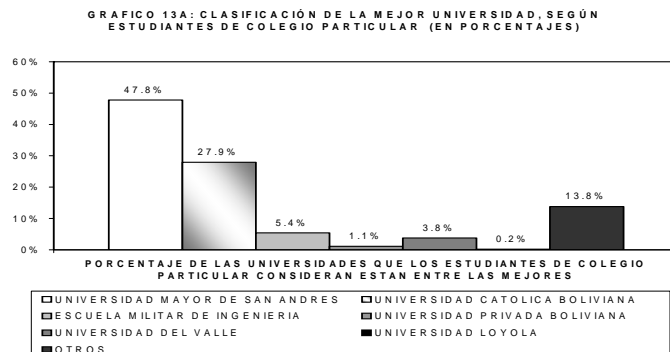
university in function to the offer of the career of its election. In certain measure, bound to the prestige of the university, they are who they choose certain superior house of studies because he/she offers them good opportunities to get employment, what represents 14.4 percent; a similar percentage chooses the university for the social, while little atmosphere less than 10 percent of the students they choose certain university for the easiness in the obtaining of scholarships.



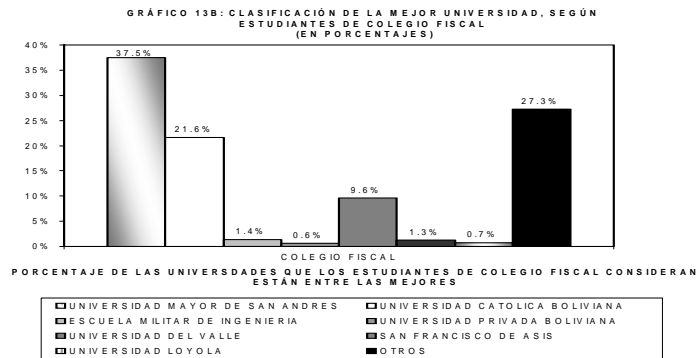
FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

Investigating regarding the qualification that the school students granted to the different universities of The Peace, it is observed clearly that the University bigger than San Andrés (UMSA) it is the one that has bigger prestige; this way, 47.8 percent of the students of school matter and 37.5 percent of the students of fiscal school, they chose to the UMSA like the best university. The Bolivian Catholic University is in second place (UCB), of the students of school matter, 27.9 percent chose to the UCB like the best university and for 21.6 percent of the students of fiscal school the UCB is the best university. The other universities continue at a considerable distance (Graphics 13A and 13B).

The qualifications that the students carry out on the different universities although they are of the city of The Peace, they can be generalized at national level when indicating that Bolivia has a long university tradition, what allows to the public universities to enjoy a good prestige, giving the preference of the students as a result for the public universities.

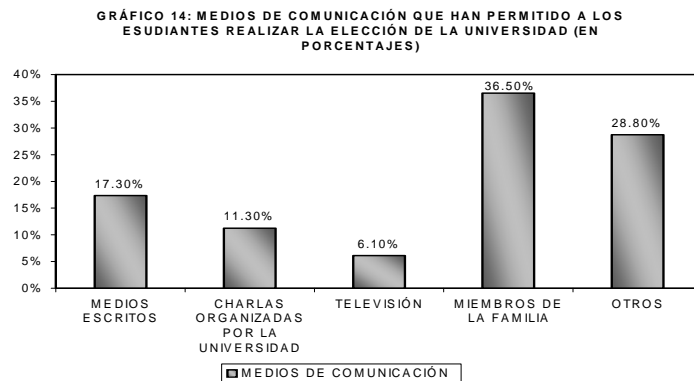


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Next he/she is carried out an analysis of the elections that the students carry out with respect to the university and the career that eligirían. In the graph 14 are presented which was the means of communication that mainly influenced in the students to make their decision regarding the election of an university; there it is observed that more than a third of the students he/she decided the university to which would go in function to the information received by members of their family, they continue him in importance the written means (17.3%), the chats organized by the university (11.3%) and the publicity for television (6.1%).



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

In the Graphics 15A and 15B they stand out the main elected careers for the future university students of the city of The Peace, classified by sex and according to their acting in the school. The best students women in the schools have preference to study Right, Medicine and Administration of Companies; in the case of the best male students their preferences concentrate on Engineering of Systems, Right and Medicine. The careers that you/they appear in the graphics are the most representative in terms of preferences, being that the other ones are contained in the category others.

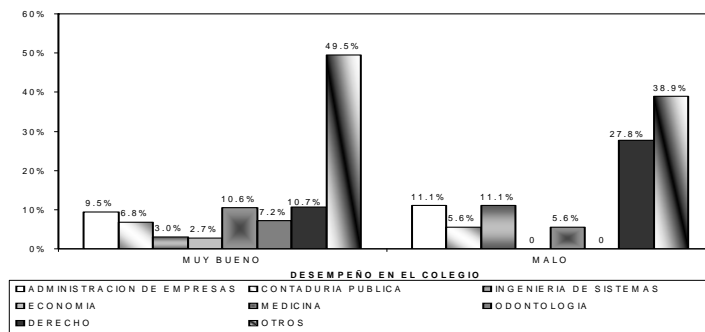
Something more than a room of the student's women that you/they had a bad yield in their school studies has the intention of entering to study Right, they continue him in second place, Administration of Companies and Engineering of Systems. In the case of the male

students whose acting in the school was not good, these chose to study Engineering of Systems and, in second place, Administration of Companies, Medicine and Electronic Engineering.

Of these results you can conclude that the school yield is not a decisive variable to choose the career to study in the university, rather the election of the career would seem to be mostly certain for the innate abilities of the students and the supposed possibilities of being inserted in the labor market.

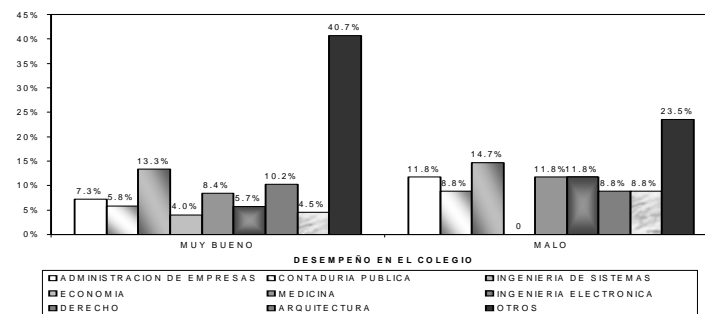
To object of supplementing the previous information, the Graph 16 show us the decisions of election of the career in correspondence to the preferences that have the students for the quantitative sciences and the theoretical sciences. In this case a marked lack of information is observed on the part of the school students, this way, the students to those that they like the mathematics, by 20.7 percent chose the career of Public Accounting and 16.2 percent they lean for Administration of Companies. On the other hand, the students whose preference is the theoretical matters prefer to study Right (36.1%), followed by Medicine (12%) and Social Communication (6%).

GRÁFICO 15A: CARRERAS QUE ELIGEN LAS ESTUDIANTES MUJERES SEGÚN SU DESEMPEÑO EN EL COLEGIO (EN PORCENTAJES)



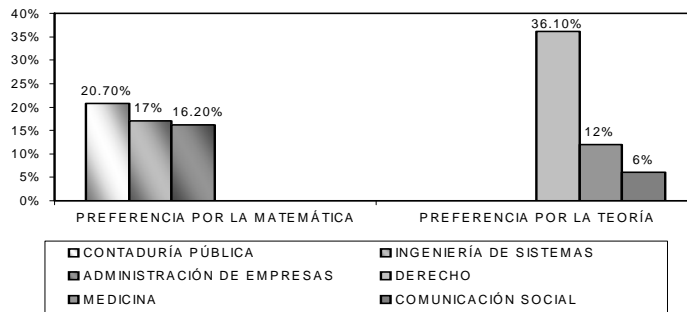
FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

GRÁFICO 15B: CARRERAS QUE ELIGEN LOS ESTUDIANTES HOMBRES, SEGÚN SU DESEMPEÑO EN EL COLEGIO (EN PORCENTAJES)



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

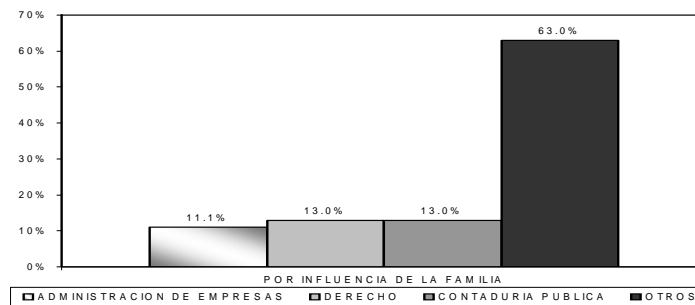
GRÁFICO 16: CARRERAS ELEGIDAS POR LOS ESTUDIANTES SEGÚN PREFERENCIAS (EN PORCENTAJES)



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

Lastly, the Graph 17 sample the influence of the family determines the election of the career to continue on the part of the new university students in what measure. The three careers where the influence of the family is more important they are Right, Public Accounting and Administration of Companies.

GRÁFICO 17: CARRERAS QUE ELIGEN LOS ESTUDIANTES POR INFLUENCIA DE LA FAMILIA (EN PORCENTAJES)



FUENTE: ELABORACIÓN PROPIA SOBRE LA BASE DE LA EEB, 2002

#### 4. Meditate and Summations

A first element that suits to highlight of this investigation is the high bias of the parents it is necessary to invest in the education of its children, aspect that is presented from an independent way to the instruction level achieved by the parents, although certainly the parents with superior education levels also present a bigger bias to invest in the human capital of their children. This bias doesn't make difference between its male children and its daughters women, that which would be showing that it is not completely certain the hypothesis that a discrimination exists against the women at level of the homes of the capital cities of department.

Also, you could verify that the homes would have been able to perceive that the private education at secondary level is of better quality that the public education, for what the homes of reduced revenues even make the effort to put to their children in private schools. It

is also observed that as much as adult is the education grade reached by the parents, bigger the effort so that his children attend a private school.

In previous investigation works carried out by the Institute of Socio-economic Investigations of the Catholic University, it has been demonstrated that the level of the public education at school level, is of smaller quality that the education in the private establishments; however, the procedural data in this investigation show that the yield of the students in the private schools is higher than the students of the public schools. This phenomenon is highly preocupante, as long as the youths of homes of reduced revenues are not only discriminated against by an educational offer of smaller quality, but rather, for the conditions of their homes, its yield is lower.

It is observed that almost 90 percent of the students, be already of school matter or fiscal, they have the intention of continuing their studies in the university. This it is explained, in great measure, for the necessity of being qualified for, later on, to be able to enter to the labor market under better conditions.

It is prominent to observe that a direct transition of the students of private schools doesn't exist toward private universities, but rather that an important percentage of the students of particular schools prefers to enter to the public university. This phenomenon can respond to several factors, among them: that the private universities didn't still reach the prestige that makes them eligible, we have this way that the proportion of the school students, so much private as fiscal, they consider that the University bigger than San Andrés is the best university in the city of The Peace, following him in second place the Bolivian Catholic University, while the other private universities are at a very considerable distance in recognition terms. The fact that the private universities don't offer all the careers is also, while the public universities yes him ago. It is probable also that the study costs in a private university of relative prestige are very high, very above the costs average of the private schools, that which would be the cause so that the students cannot enter to the private universities.

By way of closing this investigation, it is important to present two reflections: First, the existence of a marked lack of the family parents' information and of the own students of schools regarding the possibilities that he/she offers the labor market to the graduate university students; bound to it, it is also the lack of information regarding the quality of the studies in the different domestic universities. This transparency lack in the market of the superior education would be taking to the parents to carry out investments that are not the good ones. Second, it is also observed a lack of information in the young students regarding the content of the different professional careers, that which could be one of the causes that explains the high desertion grade and of career change that is observed in the universities.

The identified problems don't make to a non rational behavior on the part of the family parents or the young postulantes to the university, on the contrary, a behavior is observed that spreads to invest in the future; the problems are the reflection or the effect of a very not very dynamic social structure and an institutional framework that it doesn't reveal the market and, for ende, it doesn't allow to the economic factors to make the best decisions.

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