#### i) type of submission: CONTRIBUTED

## (ii) title of paper: SOCIAL NETWORKS AND SCHOOLING INVESTMENT DECISIONS;

### (iii) Author: BLANCA ZULUAGA

### (iv) email: <u>bzuluaga@icesi.edu.co</u>

address: Calle 18 #122-135 Cali- Colombia

affiliation: Universidad Icesi (Cali): Lecturer and researcher. Catholic University of Leuven: Last year PhD student.

NOTE: Iwould like to apply for financial support if possible.

# ABSTRACT

It is well known that certain factors like ability and the level of family income play an important role in determining the amount of human capital investment that an individual is willing to undertake. Although public education is free in many countries at basic and medium level of schooling - there is no monthly fee- and relatively cheap at the superior level, there are other costs like transport, food and clothes, among others, that poor families cannot afford. Besides, credit markets are incomplete, excluding most of the low income potential applicants.

Any individual faces a trade-off between attending school and getting a job. The income that a poor person may obtain if he skips school and goes to work is relatively more important for his household, compared to the importance for a rich household of the income that a rich individual may get by undertaking the same action. Hence, investing in education is less costly for the wealthier. In addition, a poor person may (perhaps correctly) believe that, if he invests in schooling, there would not be many good quality jobs for him to get, as there would be if he were a rich person. This belief may discourage him from carrying out higher levels of educational investment, as he perceives that the instrumental value of education for him is low.

This paper aims at exploring the existence of an additional factor influencing the educational investment decisions such as the social networks that individuals belong to. In particular, we state that the "quality" of the network influences the expected returns to education, encouraging or discouraging individuals' investment in additional years of schooling. The "quality" of the social networks refers to the schooling level and links with the labor market of the network's members or ties (e.g. family members, neighbors, colleagues, bosses, classmates, teachers, among others).

It is possible to find individuals belonging to the same community or neighborhood, who share certain attributes like family income and ability, ending up at different schooling equilibrium levels, expected future income and expected social mobility. The analysis of social networks may offer us good ideas to explain this phenomenon and to explore why policies of educational expansion favor only a small portion of low income individuals.

Previous studies on social networks and investment decisions compare groups of population from different communities with different socioeconomic levels. In this paper we intend to compare groups inside the same type of community, i.e. the poor. These individuals, in spite of belonging to the same type of neighborhood, partially differ in the composition of their social network. This type of focus, applied to schooling decisions, constitutes a contribution to the existing economic literature in social networks. An initial step is to make explicit how the social network quality affects educational investments of individuals. The network's quality has an effect on the perception of individuals on the returns to education, which in turn influences their educational decisions. A specific measure for the quality of social networks is proposed, whose information requirements are: i) "quality" of each member of the network, based on educational level and labor position, and ii) the weight of each member.

An important definition is the "key tie". This is a concept characterizing a non-relative member of the network who plays a decisive role in determining the overall quality of the social network. A key tie is an initially weak tie (under kinship criterion) who turns up to be a strong tie if we adjust his weight by factors like closeness, intimacy, economic support and admiration. Although the concepts of weak and strong ties are commonly used in the literature of social networks, there is no consensus on their precise definition. We do not pretend here to be more accurate in defining the concepts, instead, we adopt an ordering for strength of ties originally based on kinship: family (stronger), friends and acquaintances (weaker), and subsequently modified by the mentioned adjustment factors (closeness, intimacy, economic support and admiration). These adjustment factors may lowered the weight of originally strong ties and could make a weak tie become a key tie.

We present a model that describes the individual decision making process regarding educational investment. It is claimed that using a Logit model of schooling is appropriate to check whether, as expected, the variable "quality of the network" has a positive and significant influence in the decision of the individuals to continue studying or not.

An empirical analysis is included in this paper. We work with two groups that are called target and control groups. Individuals in both groups are similar in their socioeconomic conditions and intellectual ability. Those in the first group have continued studying after secondary school whereas those in the control group have not. We find out the schooling level and the labor position of each member of the individuals' network in order to estimate the quality of the network. We then present the results of the model testing the influence of the network quality on the decision of individuals to continue studying.