Artículo de investigación científica y tecnológica

Socioeconomic determinants of economic reintegration in Colombia: evidence from a Probit Model

Determinantes socioeconómicos de la reinserción económica en Colombia: evidencia a partir de un modelo Probit

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ABSTRACT

This paper seeks to determine what socioeconomic aspects influence the economic reintegration process of former combatants from illegal armed groups in Bolívar, Colombia. For this purpose, an analysis of some variables such as age, gender, educational level, marital status, former group, family income and type of demobilization is carried out. Methodologically, a two-stage econometric binary choice model (Probit) was applied. This research found that educational level, family income and gender are the key socioeconomic determinants of economic reintegration in the population under study. Finally, the scholar community is invited to carry out studies of this type in order to understand the factors that can affect the economic re-integration of ex-combatants across the country. These analyzes provide critical information for designing more successful reintegration programs for insurgent groups, considering that Colombia is currently going through a massive demobilization process which will require a successful reintegration program that prevent former combatants from recidivism.

RESUMEN

Esta investigación busca determinar cuáles son los principales factores que tienen incidencia en la reinte-gración económica de los excombatientes pertenecientes a grupos armados al margen de la ley en Bolívar, Colombia. Para alcanzar lo anteriormente planteado, se llevó a cabo un análisis de un grupo de variables socioeconómicas como: edad, genero, nivel educativo, estado marital, número de hijos, ingresos familiares, tipo de desmovilización y grupo insurgente del excombatiente. El marco metodológico está representado por un modelo de selección binaria (Probit). Esta investigación encontró que el nivel educativo, el género y el ingreso familiar son los determinantes socioeconómicos clave de la reinserción económica en la pobla-ción objeto de estudio. Finalmente, se invita a la comunidad académica a realizar estudios de este tipo con el fin de comprender los factores que pueden afectar la reintegración económica de los excombatientes en todo el país. Estos análisis brindan información crítica para diseñar programas de reintegración más exitosos para los grupos insurgentes, considerando que Colombia actualmente atraviesa un proceso de desmovilización masiva que requerirá un programa de reintegración exitoso que evite la reincidencia.

INTRODUCTION

One of the main challenges of Colombian Government has been the socioeconomic reconstruction of all its territories, through the democratic transition of illegal armed groups to legality (Department of National Planning - DNP, 2015). The Agency for Reincorporation and Normalization (ARN) stores relevant and periodically updated information about former combatants who completed the reintegration route in Colombia.

This research seeks to establish the determinants of economic reintegration in former combatants who completed the reintegration route in the department of Bolívar, Colombia; analyzing the degree of influence of socioeconomic variables on the employability of this population.

Thus, this paper starts with a theoretical contextualization of the term "reintegration", taking into consideration that reintegration is a phase of a complex process in which some terms such as reinsertion, reincorporation and reconciliation converge. These terms have similar meanings but they are different.

This research can be addressed as a descriptive study with a quantitative-qualitative approach. On the one hand, an econometric binary choice model (Probit) was applied to make a quantitative determination of the socioeconomic variables that affect the economic reintegration process. On the other hand, some in-depth interviews with former combatants provided qualitative information that supports the results obtained from the econometric model, and also provided relevant data for the research that is beyond the quantitative outcomes.

For the results show a descriptive analysis of the selected explanatory variables was carried out, in order to determine their impact on economic reintegration (response variable). With this analysis, it was determined whether the explanatory variables behaved as expected according to the literature review. Then, two binary choice model (Probit) were estimated: in the first model all the explanatory variables were included in order to determine which of these had the required significance levels and which did not. In the second model, only the variables that reached the significance levels required in the first model were included.

Lastly, some final considerations are presented comparing the results of the econometric model with the perspectives of former combatants about analyzed variables. Furthermore, some recommendations were made in order to improve the indicators of economic reintegration in Bolívar, Colombia.

Theoretical Framework

Economic reintegration is one of the different types of reintegration. As mentioned before, this is a concept that differs from similar and confusing terms such as reconciliation, reincorporation and reinsertion. Before understanding its economic dimension, it is important to define the word reintegration, which is usually described as the final stage of a complex process that begins with disarmament, continues with demobilization and ends with reintegration (Giraldo, 2010).

Disarmament, Demobilization and Reintegration (DDR) Process

DDR is a complex process that seeks to contribute to security and stability in countries immersed in post-conflict contexts, in which political, military, security, humanitarian and socioeconomic variables intervene (United Nations - UN, 2019). De Coning & Romita (2009) indicate that DDR process is an intermediate stage between the peace agreement and the reconstruction of a country; therefore, it must be assured that peace achieved becomes irreversible. For this, it is necessary to work the conflict from its origin, in order to avoid the appearance of new hostilities between the parties involved in the conflict. In this type of process, it is essential that governmental and non-governmental entities understand that DDR is not an instrument to achieve peace by itself, but it is a facilitator (Munive & Stepputat, 2015).

Disarmament is the initial stage of the DDR process and is defined as the act of giving up weapons including ammunition, explosives and nuclear, chemical, biological, radiological or conventional systems. The disarmament stage must be effective, efficient and safe; it must be specifically designed to adapt to the security environment, and planned in coherence with efforts made to consolidate peace (UN, 2019; Giustozzi, 2016).

Demobilization is the second stage of the DDR process and is defined as the definitive, official and controlled discharge of active combatants from illegal armed groups. Demobilization is a physical and mental process. In the physical dimension, a person separates from his/her firearm, reducing the number of individuals in an insurgent group. In the mental dimension, the former combatant is psychologically prepared to forget the kind of life he/she had during war and to find a place in civil society (Muggah & O´Donnell, 2015. The demobilization can be in-

dividual or collective, which means that a person can demobilize at his/her own decision or within a massive demobilization program (UN, 2019).

Finally, reintegration is considered the final stage of the DDR process, in which the former combatant achieves civil status and gains access to sustainable employment and income (UN, 2019). It is a stage subject to continuous improvement. In fact, the Third Report of the Secretary-General on DDR of the UN (2011) delves into a new concept of "Sustainable Reintegration" which recognizes the political and social dimension with the same level of importance as the economic dimension.

Reintegration

Reintegration is a long-term process in which former combatants from illegal armed groups acquire civilian status and obtain sustainable employment and income. Reintegration has an economic, social and political dimension. According to the Integrated DDR Standards (IDDRS), it has an open period of duration and requires long-term external assistance (UN, 2019).

In the first place, it is important to recognize the differences between reinsertion and reintegration beyond the conceptual debate, since both of these concepts influenced the construction of public policies for former combatants in Colombia (Escobar et al., 2019). In this sense, reinsertion is a short-term process of an assistance nature, where the former combatant receives humanitarian aid and support to return to civil life safely. On the other hand, reintegration is a long-term process, where the former combatant return to civility, most of the times with access to employment and sustainable income generation (Gleichmann et al., 2004, as cited in DNP, 2018). For some authors such as Humphreys & Weinstein (2007) reinsertion is an initial phase which is part of reintegration. For other authors it is a transitional stage between demobilization and reintegration (Thorsell, 2013).

The term reincorporation, for its part, contains elements that differentiate it from reintegration, particularly with regard to the political dimension. In this sense, reincorporation differs from reintegration insofar as reincorporated former combatants have the opportunity to immediately participate in political environments, while reintegrated ex-combatants do not enjoy this benefit (ARN, 2017; (Rhyn, 2019). It is important to say that this differentiation is made in the Colombian context of Peace Agreements.

Economic Reintegration

Among the social, political and economic dimension of reintegration, the latter is considered the most important because former combatants' permanence on legality usually depends on their access to labor market and sustainable income generation (Thorsell, 2013). Additionally, unemployment is one of the main causes of recidivism in crime (Kapplan & Nussio, 2018).

Economic reintegration is based on the creation of opportunities to help ex-combatants find employment or generate sustainable income, in order to remain as productive individuals within the law. Creating economic opportunities is essential to help former combatants rebuild their civilian lives. This vulnerable population have consistently identified the capability of generating income as a key factor for their successful reintegration. Many of them have also indicated that being able to provide for their families is important for establishing their sense of identity and increasing their self-esteem (Kapplan & Nussio, 2018).

METHODOLOGY

This research seeks to determine what socioeconomic variables affect the economic reintegration of former combatants in Bolívar, Colombia; through the application of a probit model with a discrete dependent variable that can only take two possible values: 1= reintegrated, and 0= not reintegrated. It should be noted that, for this study, being reintegrated or not reintegrated is circumscribed to the economic dimension of reintegration.

According to the definition of economic reintegration (detailed in the theoretical framework), it is determined that number 1 value is for former combatants who have a formal job. On the other hand, the number 0 value is for former combatants who have an informal job or are unemployed. It is important to mention that informal jobs are included in the number 0 value (not reintegrated) due to their lack of sustainability (Ruzek, 2015) which is an important attribute to consider a former combatant as reintegrated. The Probit model allows to determine the probability of a former combatant who has completed the reintegration route to be formally linked to the labor market, taking into consideration certain characteristics.

For Ariza et al. (2016) this type of model has advantages over other binary choice models such as the Linear Probability Model (LPM), since the impact that variables to be measured have on the dependent variable does not simply correspond to the coefficients of the estimated models, but depends on the explanatory variables (Muthén, 1979). Additionally, LPM models have other

problems such as heteroscedasticity and limitations inherent to the determination of coefficient R2 (Ariza et al., 2016). This has led authors to search for alternatives to achieve more reliable estimations of dichotomous variables. At this point, binary choice models with discrete variables become relevant. The probit model proposed in this research is expressed as follows:

$$Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \cdots + \beta_k X_{ik} + e_i \qquad (1)$$

Where Y_i = status of former combatant regarding the reintegration route (reintegrated or not reintegrated); X_{ik} = vector of explanatory variables (age, gender, educational level, marital status, former group and family income and type of demobilization). Finally, e_i = error term.

The independent or explanatory variables used for this research are available at ARN´s website in the section "*Reintegración en Cifras*". These variables were selected based on previous studies developed by theoretical referents such as Becker (1993) with the theory of human capital and McQuaid & Lindsay (2005) who analyzed a group of variables that can add or subtract from

individuals in order to get a formal job. Furthermore, some explanatory variables (former armed group / type of demobilization) were included in the model at authors´ discretion, since it is considered that these variables may have an impact on the response variable. This is because in Colombia there are government reports that have indicated that, as a result of the disorganization in the treatment of individual and collective demobilizations, former combatants who demobilized collectively from the United Self-Defense Forces of Colombia (AUC) came to enjoy greater benefits during their reintegration route (Thorsell, 2013). Therefore, dummy or dichotomous variables will be established with respect to the former armed group and type of demobilization of former combatants in order to determine whether being a former member of the AUC - collectively demobilized - has any positive effect on the individual´s economic reintegration. However, a positive effect (+) is not expected for any of these two variables (Table 1), since there is no scientific evidence to support it. Therefore, it is established that these variables do not have a specific expected effect (+/-).Table 1 shows the operationalization of variables used in this study, along with their expected effects.

Table 1. Operationalization of variables

Dependent Variable			
Variable	**Description**	**Expected effect**	**Source**
Economic Reintegration (ECRE)	Dummy variable (1= have a formal job; 0= Does not have a formal job)	Not applicable	Becker (1993) y Thorsell (2013)
Variable	**Description**	**Expected effect**	**Source**
Age (AGE1)	Numeric variable. It will be distributed by age groups according to Erikson's stages of development (cited by Bordignon, 2005). 1. Between 12 y 20 years old. 2. Between 20 y 30 years old. 3. Between 31 y 50 years old. 4. More than 50 years old.	(+)	Bordignon (2005), Kriger (1995) & Allgood (2020) & Bordignon (2005)
Age2 (AGE2)	Age squared. It measures the diminishing marginal returns on years of age over the economic reintegration of former combatants.	(-)	(Kriger, 1999)
Educational Level (EDLE)	Coded by years of study according to education levels of Colombian Ministry of Education: Literacy: 0 years of study. Basic primary: 5 years of study. Basic secondary: 9 years of study. Bachelor: 11 years of study.	(+)	Braña & Anton (2007), Kerr et al. (2020) and Oswald-Egg & Renold (2021).
Gender (GEND)	Dummy variable (1= masculine; 0= feminine).	(+)	Song (1995), Braña & Antón (2007) and Kokot (2015)

Marital Status (MAST)	Dummy variable (1= have a spouse; 0=does not have a spouse).	(+)	Braña & Anton (2007) Choi et al. (2020) and Braun et al. (2020)
Children (CHIL)	Dummy variable (1= have children; 0=does not have children).	(+)	López (2001).
Family income (FAIN)	Numeric variable. Recoded taking into account income in terms of Minimum Monthly Wage (MMW): 1. Less than 1 MMW 2. Between 1 and less than 2 MMW 3. Between 2 and less than 3 MMW 4. Between 3 and less than 4 MMW. 5. 4 MMW or more.	(-)	López (2001)
Former armed group (FARG)	Dummy variable (1= was a former AUC member; 0=was not a former AUC member).	(+/-)	Thorsell, (2013)
Type of demobilization (TYDE)	Dummy variable (1= individual demobilization; 0= collective demobilization).	(+/-)	Thorsell, (2013)

Source: Own elaboration based on data from the Agency for Reincorporation and Normalization (ARN).

RESULTS

Descriptive analysis of variables

For this analysis, a microdata database composed by all former combatants who completed the reintegration route in Bolívar since the beginning of the program until September 2019 was used. The information of the database was cleaned and organized according to the variables that were included in this research as hypothetical determinants of economic reintegration.

Table 2 shows that 23.86 % of former combatants from Bolívar are economically reintegrated, i.e. they have access to a formal and sustainable employment. The other 76.14 % of them are located in the informal sector of the labor market or unemployed, which means they are not economically reintegrated.

The variable corresponding to the age of former combatants was organized by age groups according to Erikson´s stages of psychosocial development (Bordignon, 2005), which establish three types of ages distributed into four groups: adolescence (12-20 years), the young adult (21-30 years), the adult (31-50) and the elderly (over 51 years).

Concerning the age variable, there was an increase in the percentage share of former combatants who reached economic reintegration between 21 and 30 years old (6.38 %), and those who reached economic reintegration being between 31 and 50 years old (87.23 %). Then, when analyzing the participation rate of reintegrated former combatants over 51 years old, the figure shows that percentage share decreases to 6.38 %. These results show the expected effects according to the economic literature reviewed, which indicates: the older the individual, the greater the chances of getting a job. However, after reaching work maturity (between 31 and 50 years old), diminishing returns start to happen in labor market´s participation (Kriger, 1999). The results obtained with respect to this variable concur with the results of Allgood (2020), Carlsson & Eriksson (2019) and Geyer et al. (2020), where it was found that age is one of the most common forms of employment discrimination.

In order to calculate the educational level of the population under study, the variables were recoded according to the years of education in each academic level. In this sense, a person who finished the basic primary level has five years of education; the basic secondary level, nine years of education. Finally, when an individual gets a bachelor degree, it means he/she completed eleven years of education (Ministry of National Education of Colombia- MEN, 2010). For those former combatants who never went to school and only learned to write and read (literacy), the years of education were taken as zero.

Education variable shows that as the former combatant´s level of education increases, his/her economic reintegration rate also increases. That is, former combatants with a literacy level participate with 1.06 % and are followed by those who reached basic primary, basic secondary and bachelors with percentages of 8.51 %, 25.53 % and 64.89 %, respectively. These results concur with other studies carried out by Groot et al. (1994), Braña & Anton (2007), Kerr et al. (2020) and Oswald-Egg & Renold (2021). In general terms, these studies showed that in increasingly complex markets, more educated and qualified

people are needed.

For its part, gender variable shows that 96.81 % of reintegrated former combatants are men and 3.19 % are women. It is important to acknowledge that the analyzed sample of 394 individuals is composed by 356 men and only 38 women. Nevertheless, the results about economic reintegration rate by gender in this research are congruent with those obtained by other authors such as Song (1995), Braña & Antón (2007), Kokot (2015), Peng & She (2020) and Baquero et al. (2000) who stated that there is gender discrimination against women in the labor market.

In addition to the above, it is observed that 65.96 % of reintegrated former combatants have a spouse, while 34.04 % do not. These results concur with studies carried out by Choi et al. (2020) and Braun et al. (2020). It is presumed that the individual, in this case the former combatant, is financially responsible for his/her spouse, therefore, has a greater need to access the labor market.

On the other hand, descriptive analysis shows that 60.64 % of reintegrated former combatants have children, while 39.36 % do not. This is a likely outcome taking into account that former combatants with children have greater needs to access a job due to the economic responsibility they acquire with their offspring (López, 2001; Braña & Anton, 2007).

Family income variable shows there is an inversely proportional relationship between family income and economic reintegration in former combatants from Bolívar (the higher the family income, the lesser number of former combatants reintegrated), excluding those ex-combatants whose family groups earn less than 1 MMW. These individuals have a percentage share of 34 %, ranking below ex-combatants whose family groups earn between 1 and 2 MMW (50 %). From there on, the higher the income of the family group, the lower the percentage of economic reintegration. These results concur with the ones obtained by López (2001) who indicates that the income of the other members of the family converts the individual into a surplus worker that increases his/her period of inactivity because the high levels of income at home support his/her decision not to work.

Finally, the descriptive analysis shows that former combatants who were part of the AUC (79.79 %) and demobilized collectively (78.72 %) have a greater tendency to be reintegrated. This can be explained by the disorganized processes of individual and collective demobilizations there were once in Colombia. In this sense, those who demobilized collectively received better economic and assistance benefits than those who did so individually (Ministry of Interior of Colombia, 2008, as cited in Thorsell, 2013).

Table 2. Descriptive Analysis Variables

Variables	Percentage	
Former combatants who finished the reintegration route in Bolívar, Colombia.		
Reintegrated	23.86 %	
No reintegrated	76.14 %	
Economic reintegration rate by age groups		
Between 21 and 30 years old	6.38 %	
Between 31 and 50 years old	87.23 %	
More than 50 years old	6.38 %	
Economic reintegration rate by educational level		
Literacy	1.06 %	
Basic Primary	8.51 %	
Basic Secundary	25.53 %	
Bachelor	64.89 %	
Economic reintegration rate by gender		
Male	96.81 %	
Female	3.19 %	

796

Economic reintegration rate when having spouse and children.	Spouse	Children
Yes	65.96 %	60.64 %
No	34.04 %	39.36 %
Economic reintegration rate by family income		
Less than 1 MMW	34 %	
Between 1 and 2 MMW	50 %	
Between 2 and 3 MMW	12 %	
Between 3 and 4 MMW	4 %	
4 or more MMW	0 %	
Economic reintegration rate by armed group.		
AUC	79.79 %	
Other groups	20.21 %	
Economic reintegration rate by type of demobilization		
Individual	21.28 %	
Collective	78.72 %	

Source: own elaboration

Application of binary response model (PROBIT)

At first, the model was estimated using all the explanatory variables selected for this research (Table 3). However, some of these variables such as age, number of children, marital status, type of demobilization and former armed group did not reach the accepted level of significance (probability of chi square less than 5 %). Therefore, a second model was estimated excluding variables which did not obtain acceptable coefficients. This, in order to determine if the variables that were individually significant in the first model, maintained an acceptable level of significance in the second. It should be noted that some variables such as age and marital status, even though they did not reached an accepted level of significance, were still used for the final model due to the importance that, according to the literature review, they have for studies about labor market´s access

(Braña & Antón, 2007). Additionally, the expected effects of these variables are another factor that supported their inclusion in the final Probit model. As can be seen in Table 3, when estimating the second model, the significant variables of the first model (education, gender and family income) maintained their level of significance.

The first and second model showed a Pseudo R2 of 7 % which is kind of a low model fit. However, it is important to say that the model met the expected effects which allows quantifying the preponderance of the selected regressors. Additionally, as Gujarati & Porter (2009) state, the goodness of fit in binary regression models is of secondary importance, since the expected effects are the most important outcomes in the model. Moreover, the two models are statistically significant because the Chi square probability is less than 5 %, ruling out the possibility of global non-significance of the models (Table 4).

Table 3. Application of first and second Probit Model

Probit 1			Probit 2			
Var.	Coef.	P> z	Var.	Coef.	P> z	Marginal Effect (dy/dx)
AGE1	0.032 (+)	0.79	AGE1	0.042 (+)	0.72	0.0118

AGE2	-0.001 (-)	0.67	AGE2	-0.001 (-)	0.61	-0.001
EDLE	0.103 (+)	0.01	EDLE	0.101 (+)	0.01	0.029
GEND	0.915 (+)	0.01	GEND	0.931 (+)	0.01	0.265
MAST	0.176 (+)	0.33	MAST	0.151 (+)	0.33	0.043
CHIL	-0.056 (-)	0.75	FAIN	0.323 (+)	0.00	0.092
FAIN	0.316 (+)	0.01				
FARG	-0.540 (-)	0.35				
TYDE	0.061 (+)	0.28				

Source: own elaboration

Table 4. Global indicators of first and second Probit Model

	Probit 1	**Probit 2**
Number of obs	394	394
L R chi 2	35.1	32.9
Prob > chi 2	0.0001	0.0000
Pseudo R 2	0.0789	0.0754

Source: own elaboration

DISCUSSION

As observed in results section, education variable obtained the expected positive effect. In this sense, the higher the education level of the former combatant, his or her probability of reaching economic reintegration will increase by 2.9 percentage points. This happens because when people are educated, they gain knowledge which improves their skills in the labor market (Braña & Antón, 2009).

Regarding the gender variable, the results also showed the expected effects. In this sense, if the former combatant is a man, his probability of reaching economic reintegration increases by 26.5 %. The foregoing concurs with the literature reviewed during this research which indicates there is employment discrimination against women in the labor market.

If a former combatant has a spouse, the probability of reaching economic reintegration status increases by 4.3 percentage points. This makes sense considering that 90.3 % of the population under study are men who are usually responsible for their spouses (López, 2001).

Family income did not obtain the expected neg-

ative effect according to the studies that support the conception of the surplus worker. On the contrary, the marginal effects of the Probit model indicated that the higher the family income, the probability of reaching economic reintegration increases by 9.2 percentage points. The results with respect to this variable showed that a former combatant who completed the reintegration route does not become a surplus worker, regardless of his/her family income.

Although the age variable is not presented as a significant variable in the estimated model, it showed the expected positive effect according to literature review. In other words, as the age of the former combatant increases, the probability of economic reintegration increases as well. It is important to mention that the inclusion of an age-square variable (AGE2) in the model, seeks to demonstrate whether there are diminishing marginal returns with respect to the dependent variable. In this case, the variables AGE1 and AGE2 showed the expected effects: as a former combatant grows older his/her probability of reintegration increases by 1.1 percentage points. Then, with respect to the age-square variable, a decreasing effect of 0.01 % was perceived.

CONCLUSION

In general terms, it can be said that variables that

significantly determine the economic reintegration of former combatants in Bolívar are education level, gender and family income. However, not all of these variables showed the expected effects when applying the Probit binary response model. Additionally, age and marital status were included in the final model based on the theoretical relevance and expected behavior of these two variables.

Regarding the education level, gender, marital status and age of former combatants, the expected positive effects were successfully obtained. On the other hand, family income, which was the variable with the highest level of significance, did not obtained the expected negative effect. Below, the main conclusions for each explanatory variable selected for the final model will be presented:

1. In terms of education, it is clear that the higher the former combatant's educational level, the greater the probability of economic reintegration in the labor market. These results are aligned with other studies which establish that education is a source of knowledge and skills for the workforce. These results show the importance of re-insertion stage where the former combatants get the chance to gain some knowledge and skills to succeed in the labor market. In this sense, the ARN must ensure that former combatants get interested in educating themselves, in order to acquire the necessary knowledge and skills to improve their competitiveness and probability of economic reintegration.

2. Regarding the gender variable, the low rate of economic reintegration in women is worrying. According to the perception of some former combatants, this occurs because available jobs for population under study are usually physically demanding, therefore, men have more access than women. In response to the aforementioned, the ARN should work on a specialized plan for the economic reintegration of women, taking into account that many of them are females head of households.

3. The family income variable did not show the expected negative effect on economic reintegration. This discards the condition of surplus worker for population under study. It is important to mention that the unavailability of underage former combatants in the sample could have affected the results of this variable with respect to the expected effect, taking into consideration that surplus worker are mostly young adults.

4. The age variable is of great importance in studies about determinants of employment. Most of these studies have indicated that the older a person, the greater attraction to the labor market due to the experienced gained in working life. Nevertheless, the population under study does not have the particularity of having accumulated work experience since most of them were performing insurgent activities for the armed groups to which they belonged. Furthermore, there are limitations in the analysis of the age variable because underage former combatants are not attended by the ARN i.e. they are not included in the database. Based on the disparity in the relationship of age and work experience, and the limitation of information of underage former combatants, it can be explained the low level of significance of this variable.

5. Although the variable of marital status did not obtain the accepted level of significance, it showed the expected effects according to literature review. In this sense, having a spouse increase the probability of economic reintegration in population under study, taking into account that the majority of former combatants are men who are usually financially responsible for their spouse.

The findings and conclusions of this paper are highly relevant, taking into consideration the post-conflict process that Colombia is going through after the collective demobilization of FARC-EP. The results and recommendations of this study are expected to serve as input for the structuring of local policies in favor of current economic reintegration process and economic reincorporation process upcoming. Likewise, it is expected that this research will serve as a basis for similar studies in other regions of the country in order to improve the understanding about the reintegration process in Colombia.

Declaration on Conflict of Interest
The authors of this paper report that they are independent of financial institutions. Furthermore, it is stated that there are no interests other than those that are usually fulfilled by a research study based on a scientific methodology.

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