

Socio-Economic Characteristics and Marriage Decisions of Chadian Households

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Abstract

The main objective of this paper is to evaluate the effect of the socio-economic characteristics of men and women on the marriage decision in Chad. The methodology used refers to the Ordinary Least Squares (OLS). The data used come from the Demographic and Health Multiple Indicator Survey in Chad (EDS-MICS, 2014-2015) and the Third Survey on Consumption and the Informal Sector in Chad (ECOSIT3, 2011). Results show that, firstly, with regard to the marriage decision of men, their socioeconomic category and the age of women enhance their decision to marry; while the absence of education of man significantly delays his marriage decision. Secondly, about the marriage decision of women, their socioeconomic category (including agricultural, non-farm, and private sectors) and the age of men significantly improve the marriage decision. In addition, the lack of education of man and the socio-professional category of father of woman (senior-middle manager) delays the marriage decision of woman. Moreover, the level of education of woman (higher level) significantly delays the marriage decision. that the Chadian government develop educational and employment policies for all to improve the accumulation and enhancement of human capital.

Keywords: Human capital; Couple's economy; Ordinary least squares method.

1. Introduction

Marriage is no longer sacred as canon law and Saint Augustine taught us as early as 1184. According to the theologians, the union of the spouses is in the image of that of Christ with his Church and the married couple must be one flesh, the union between the spouses can only be dissolved by death (Augustine, 1184). The family is an economic unit but governed by social constructions.

According to Lemennicier (1988), marriage formed the basis of the family because the family among all known communities is the one that most marks the individual. In Africa, there is a deep affection that it would be good to have a large descent, this was explained by the fact that a large family was synonymous with wealth, prestige, God's blessing, and ancestors (Murray, 1981).

Descendants provide the opportunity to perpetuate the lineage of honoring the spirits of the ancestors, acquiring social power, abundant labor, physical protection of property, and assurance of old age. Descendants were needed to perform the ceremony of funeral rites (Murray, 1981).

The imperfection of markets linked to historical, social and economic constructs forces individuals to believe that it is normal for household activities to be non-market, gender role (Money, 1955). According to Laufer and Fouquet (2001): "for household activities to be recognized by public opinion and decision-makers as an important and worthwhile public activity, they should have been disguised as work with market value - which they are not, since the conditions of exchange within the family are not those of the paid sphere. »

Thus, and taking into account the perpetual search for well-being to which all households aspire, one may wonder about the effect of socio-economic characteristics on the marriage decision of Chadian households.

After this introduction, the remainder of this paper is organized as follows. Section two criticizes the existing literature; followed by section three which gives highlights on the econometric strategy and data; thereafter the empirical finding will be presented in section four and section five concludes the paper.

2. Literature Review

The presentation of the theoretical framework allows a better understanding of empirical verifications.

2.1. Review of Theoretical Works

The review of theoretical work is based on the unitary and collective approach.

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2.1.1. The Unitary Approach

In the 1960s, Becker and other theorists of the human capital approach developed the New Household Economy (NHE) which, for the first time, applied market concepts and models to household production and time allocation analysis. The NHE applied market criteria to the distribution of time, the division of labor and individual choices regarding labor force participation. It is based on five important aspects (Silber, 1981):

- The utility function relates not to an individual but to a household with the consequence that household members do not act independently;
- Utility does not depend on the quantities of goods and services, but on the characteristics of those goods;
- The concept of the "household production function" must be taken into account and this function depends not only on the goods and services purchased on the market (the characteristics of which are produced by the household), but also on the time allocated to each member of the household;
- The household faces a double constraint of income and time;
- The use of human capital to determine the quality and characteristics of production. Indeed, it is knowledge of capital that makes it possible to determine the speed with which time is transformed into goods and services (a reference to productivity).

This current only transposes the behavior of the individual to the household, which is why it is referred to as the "unitary approach". This stream assumes that individuals interacting within the household behave as a single individual. This implies the pooling of resources within the household. Thus, a monetary unit received by one spouse will have the same influence on household expenditures as if that monetary unit were received by the other spouse. However, the unitary approach is not borne out in many empirical studies. Hence the need to put forward a more appropriate collective approach.

2.1.2. The Collective Approach

The collective approach (Chiappori, 1988; Chiappori and Eklund, 2009) provides a solution to the problem of pooling resources that is both approachable and testable. According to this approach:

- An individual's well-being or level of utility depends on his or her own consumption, but also on the consumption of other people living in the household: allusion to externalities;
- The utility of an altruistic individual will directly affect the utility level of other household members, and thus indirectly the consumption of other household members; whereas the utility of a selfish individual will be affected only by his or her own consumption.

Despite the paucity of empirical literature on this issue, a few works have tested these different approaches and come up with results, the quintessence of which is set out in the following sub-section.

2.2. Review of Empirical Works

Immediately after the Second World War, a few authors began to take into account all family members. Mincer (1962) argues that married women's participation in the labor market depends not only on their potential but also on their spouse's income, the number of children in the household and other socio-economic characteristics. Some of these will address the fertility problem Becker (1960), Easterlin (1968) and the human capital investment problem Schultz (1963), Becker (1964).

The work of Becker (1960), Mincer (ibid.) will set the stage for a study of the family as a separate object. For this period thus marks the birth of the new economy of marriage. The New Economic History (NHE) of marriage makes it possible to describe the behavior of individuals and the decisions they make within the household using microeconomic tools because marriage is a partnership with a dual objective, on the one hand that of production and on the other that of consumption. Becker believes that marriage is an economic behavior like any other.

In the same order, El Haj and Zaiem (op.cit.) have made the method developed by Signorino and al (op.cit.) simpler, but whose authorship is attributed to Schultz (1963), allowing for the easy estimation of regressions based on games in extensive form, such as those linked to discrete choice strategic models. They used the individual data of spouses in Tunisia.

3. Methodology

In this section, we will present our analysis techniques, specify the models to be estimated and the results.

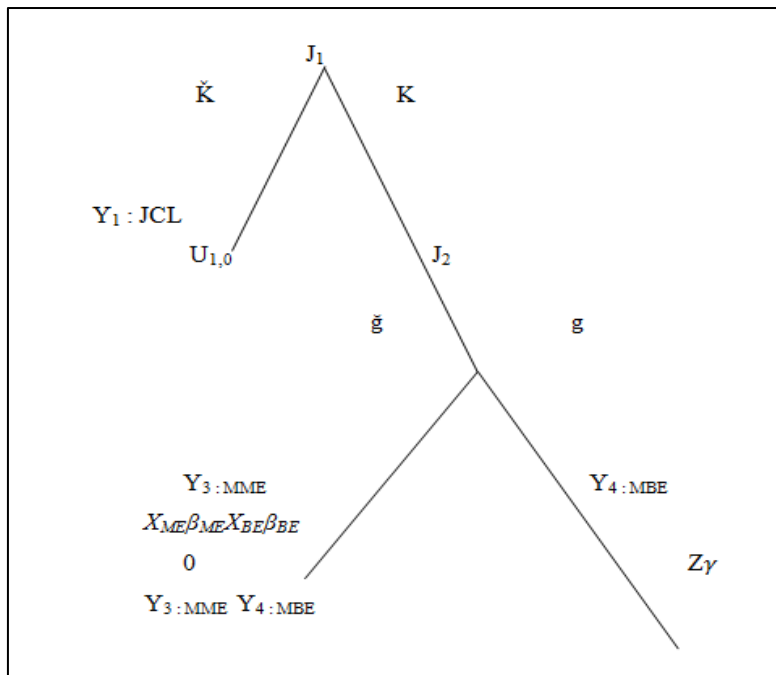
3.1. Nature and Source of Data

The study focuses on Chad. The data used are primary source data; we have retained women of childbearing age and married women; there are 300 of them and their spouses of childbearing age, of whom there are 300. Estimates are made using Stata software.

3.2. Strategic Analysis of the Marriage Process

Player 1 is the man. He can decide to get married but if he doesn't find an ideal candidate, player 2 is the woman, the iteration will stop. In case he finds an ideal candidate and the latter agrees to marry, the factors explaining this decision will be explained in the econometric model 1. In a second step, player 1 is the woman and player 2 is the man. If the latter agrees to marry, the factors explaining this decision will be explained in econometric model 2.

This process of deciding to marry will be described by the following figure.



3.3. Presentation and Specification of the Econometric Model

The models selected are based on that of [Signorino \(2006\)](#). They are as follows:

Man's decision to marry = f (His education level, his father's socio-professional category, his socioeconomic category, place of residence, household size)

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \beta_6x_6 + \beta_7x_7 + \varepsilon_i \tag{1}$$

A woman's behavior will be expressed by a number of characteristics that are specific to her (the capital she has built up for herself), those inherited from her parents (the initial endowment inherited from her parents, the initial capital) and those of her spouse (level of education).

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \beta_6x_6 + \beta_7x_7 + \beta_8x_8 + \beta_9x_9 + \beta_{10}x_{10} + \beta_{11}x_{11} + \beta_{12}x_{12} + \varepsilon_i \tag{2}$$

The data used are from secondary sources

The variables on the left represent the marriage decision of women of childbearing age and men, respectively. We used the age of married women of childbearing age. Let the interval of [15 years to 49 years] be [15 years to 49 years]. We wrote an algorithm that allowed us to retain women of childbearing age who provided at least 90% of the information in order to make the sample representative. For the male marriage decision variable, we used the age of men of working age. We have written an algorithm that allowed us to retain men of working age. Let the interval of [15-59 years] be [15 years - 59 years]. We retained men of working age who provided at least 90% of the information in order to make the sample representative.

The explanatory variables are the educational level of the woman, the occupation of the woman, the place of residence, the educational level of the man, the occupation of the father of the woman's father, the occupation of the father of the woman's mother and the occupation of the man.

4. Presentation of Results

We briefly present the results of the estimation. A summary of the various tests is presented in the appendices.

Table-1. Result of linear regression model 1 (OLS method)

Explanatory variables	Dependent variable : AgeSexMasculine
AgeSexefeminin	0.0009976*** (0.0000196)
SansInstructionFemme	3.279708*** (0.08940116)
SansInstructionHomme	-2.253236** (1.008291)
CSEHommeIndépendantnonAgricole	1.490507 (1.265369)
CSEHommeIndépendantAgricole	10.82268*** (2.545006)
CSEHommeSalariéPublic	7.400634*** (1.564441)
CSPduPèreHTravailProprecompte	1.288957 (0.8444829)
_Cons	-1.321514*

	(0.6773191)
Number of observations = 300	Fcal = 533.13
Adjusted R ² = 0.5716	Prob (F) = 0.0000

Source: Authors, from the collected data, using Stata

Note: Standard errors in parentheses. ***p < 0.01, **p < 0.05, *p < 0.1.

Table 1 presents the results obtained by the OLS method corrected for heteroskedasticity. According to this table, we can see that the model is globally significant at the 1% threshold because Prob F = 0.000. Moreover, the independent variables explain 57.16% of the dependent variable. (Adjusted R² = 0.5716). The R² represents the gain function (the profit). It is a gain function because R² has a positive sign. It leads to a favorable outcome for the decision of the man's marriage.

The woman's age, The education of the woman (uneducated woman) and the socio-economic category of the man (the fact that the man works independently in the agricultural sector and the fact that the man works in the public sector) have a positive and significant association with the dependent variable, except for the socio-professional category of the man's father (when the man's father is self-employed) and the socio-economic category of the man (the fact that the man works independently in the non-agricultural sector), which have a positive but not significant association with the dependent variable.

On the other hand, the other variable, the man's education (without education level) has a negative and significant association with the dependent variable. Its sign is consistent with that expected. According to Kinda (2009), whether we recognize it or not, society is organized according to the paradigm of things of men and women to the point of admitting that there are domains or levels of domains socially reserved for one sex or the other. If we believe Beauvoir (1949): "one is not born a woman, one becomes one. "She explained that civilization and education influence children and intentionally direct them into a male or female role by promoting social order, whereas girls and boys are not initially distinguishable.

The age of the woman positively influences the man's decision to marry, his decision to become an entrepreneur (i.e., the Chadian man wants to marry a woman of childbearing age compared to minor, protected women and women in menopause in order to probably better enjoy their investment) because women in menopause are considered unproductive. For example, the coefficient associated with the woman's age being 0.0009976 means that, on average, when a Chadian man meets a spouse of childbearing age, his decision to marry is accelerated by 0.0009976 units. The sign is not the opposite of the expected one. This influence is significant at the 1% threshold. When a Chadian man meets an uneducated Chadian woman, he is encouraged to invest in the decision to marry, because he probably wants an uneducated spouse to better assert his power as head of the family. This effect is significant at the 1% threshold. The coefficient associated with the variable uneducated woman is 3.295624, meaning that, on average, when a Chadian man meets an uneducated Chadian woman, his decision to marry is accelerated by 3.295624 units. When a Chadian man is recruited into the civil service, his decision to marry is accelerated by 7,400,634. This influence is significant at the 1% threshold. The fact that Chadian men work in an independent agricultural sector encourages their decision to marry by 10,82268 units, a significant influence at the 1% threshold. The sign is in line with that expected. The fact that the Chadian man works in an independent agricultural sector encourages his decision to marry by 1,490,507 units. This effect is not significant. When the Chadian man's father works on his own account, his decision to marry is encouraged by 1,288,957 units. This effect is not significant. On the other hand, an uneducated Chadian man is reluctant to marry because he generally lives in precarious conditions, thinks that it is not yet time to marry and ends up dying single. The influence is significant at the 5% threshold. The associated coefficient is -2.253236 units. The sign is not the expected one. This influence is non-significant.

These variables therefore represent certain socio-economic factors that determine the decision to marry at a specific age. Thanks to this association between the two categories of variables.

Table-2. Result of linear regression model 2 (OLS method)

Explanatory variables	Dependent variable : AgeSexefeminin
AgeSexemasculin	316.183 *** (41.93125)
PrimaireFemme	-918,5207 (1164.94)
SécondaireFemme	314.664 (1413.793)
SuperieurFemme	-3138.347* (1519.139)
CSEFemmeIndependantnonAgricole	8585.436*** (1197)
CSEFemmeIndependantAgricole	6626.135*** (2899.806)
CSEFemmeSalairePublic	13055.28 (3845.908)
CSEFemmeSalairePrivé	3970.085* (1319.148)
CSEFemmeAutresCatégories	-161.8582

SansInstructionHomme	(2492.25) -6706.822***
CSPduPèreHCadresupérieurMoyen	(497.3858) 15845.14
CSPduPèreFCadresupérieurMoyen	(538.7337) -6706.822***
Cons	(2381.139) 34.39669*** (1233.749)
Number of observations = 300 Fcal = 22.64	
Adjusted R ² = 0.5716= 0.5727 Prob (F) = 0.0000	

Note: Note: Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Source: Authors, from the collected data, using Stata

Table 2 presents the results obtained by the OLS method corrected for heteroskedasticity. From this table, we note that the model is globally significant at the 1% threshold because Prob F = 0.0000. Also, the independent variables explain 57.27% of the dependent variable. ($R^2 = 0.5727$). The model highlights the significant gain function since its sign is positive. This leads to a favorable result for the investment decision.

Men's age, women's education (higher), women's socio-economic category (private sector, non-agricultural independent sector and agricultural independent sector) show a positive and significant association with the variable to be explained with the exception of women's socio-economic category (public sector), women's education level (secondary) which shows a positive but non-significant association with the variable to be explained, which gives the woman of childbearing age an accelerating tendency on her decision to marry. By way of illustration, the coefficient associated with the (secondary) woman's level of education being 314,664 means that, on average for an additional year in secondary school, Chadian women are encouraged to invest in a specific age of 314,664 units; non-significant influence. When a woman's secondary school level varies by one unit, she is not encouraged to invest - 3138,347 units.

The socio-economic category of the woman (public sector) significantly influences the woman's decision to marry at the threshold of 1%, all other things being equal, on average, when the woman works in the public sector, her decision to marry is accelerated by an average of 13055.28 units. On the other hand, when she works in the private sector, her decision to marry is accelerated by an average of 3970,085 units, a non-significant influence. When she works in other categories, all other things being equal, on average, her decision to marry is encouraged by 3101,013 units, a significant influence at the 5% threshold. When Chadian women work in a self-employed non-agricultural sector, on average, all other things being equal, their decision to marry is encouraged by an average of 8,585,436 units at the 5% threshold. Finally, when Chadian women work in the self-employed agricultural sector, on average, all other things being equal, their decision to marry is encouraged by 6,626,135 units at the 1% threshold. These results are in line with our expectations and reflect the social weight to which Chadian women are subjected.

The other variables (the socio-economic category of the woman, the educational level of the woman of a specific age (primary, higher), the educational level of her spouse (no level), the socio-professional category (of the father of her spouse (middle senior executive), of the father of the woman (middle senior executive), based on the negative sign of their coefficient, tend rather to delay the woman's decision to marry. The sign of the variable, the socio-professional category (of the father of his spouse (middle senior manager) is contrary to the expected sign. In other words, when Chadian women have a primary school education, they are minors and cannot freely consent to marriage, although this does not exclude them from sexual activity, whereas women with a higher education are reluctant to marry because they are not ready to let themselves go with just anyone, "Anyone does not marry just anyone". This work corroborates with the work of Singly (2007). The Chadian man's education (without education) discourages Chadian women from accepting the proposal of marriage at childbearing age. The socio-professional category (father of the husband (middle senior executive), father of the wife (middle senior executive)) delays the decision to marry the woman. This opinion is in line with Becker (1960) and is opposed to the Thomist thesis that marriage is no longer a sacred institution as the Holy Scriptures taught us. If one believes Becker, marriage is for women both a job and a profession, then there is no reason for women to accept to offer their service to an uneducated man. Love is not a mere possession. "To love each other is above all to support each other in the face of hardship, to endure each other's common imperfections. To sacrifice oneself is to know how to grow together" (Harry, 1931). When a Chadian woman has a primary school education, her decision to marry is delayed by 918,5207 units for an additional year, a non-significant influence, whereas when she has a higher education, her decision to marry is delayed by 3138,347 units for an additional year, a significant influence at the 5% threshold. The socio-professional category of her spouse (middle senior manager), on average, all things being equal, is - 3138,347 units.

5. Conclusion and Economic Implications

The study made the following finding: In Chad, socio-economic characteristics influence the decision to marry at a specific age.

The recommendations focus on strategies to improve human capital, which is both input and output. Breaking with gender, which is a historical, social and economic construction at the origin of inequalities, firstly, between men and women and secondly, between men and women and thirdly, between women and men. Several studies have shown that an increase in the income made available to women has a positive impact on the nutrition, health and

education of children. Improving women's education will enhance their influence in this endeavor. Masculinity or femininity is the result of the mechanisms of social construction.

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