# DO ECONOMIC FACTORS DETERMINE THE END OF A CONJUGAL RELATIONSHIP? AN ECONOMETRIC INVESTIGATION 

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#### Abstract

The article investigates the subject of the married union within the context of random choice by the agent. Herein are defined the states that an agent can assume in a relationship (single, cohabitation and married) in order to discover which factors can influence the change from one state to another (single to married, for example). Hence, we use a multinomial logit model as the form of estimating probability of choice of status. According to Becker (1976), the subject of marriage in modern society can be analyzed from the rational agent's standpoint that a market exists where the agent chooses a partner to maximize utility subject to restriction. The econometric results present interesting results, displaying a certain distinction between the men's and the women's behavior, regarding status changes in the relationships. In relation to the economic factors, these were shown to be important for both sexes.


Key Words: Married union. Economic factors. Multinomial logit.

## JEL Classification: J12

Resumo: Esse artigo investiga a união marital num contexto de escolha aleatória pelo agente. Define-se o estado civil que cada agente pode assumir num relacionamento (solteiro, mora junto e casado), para descobrir que fatores podem influenciar na mudança de um

[^0]estado para outro (solteiro para casado, por exemplo). Assim, nós utilizamos um modelo de logit multinomial como uma forma de estimar as probabilidades de escolha do estado civil. De acordo com Becker (1976), o estado civil na moderna sociedade pode ser analisado do ponto de vista de um agente racional num mercado onde os agentes escolhem seus parceiros para maximizar sua utilidade sujeita a uma dada restrição. Os resultados econométricos apresentam resultados interessantes, mostrando certa distinção entre comportamento de homens e mulheres, a respeito da mudança de status no relacionamento. Em relação aos fatores econômicos, estes se mostraram importantes para ambos os sexos.

Palavras-chave: União marital. Fatores econômicos. Logit multinomial.

## Classificação JEL: J12

## I INTRODUCTION

For some time now there have been advances in the tendency of introducing subjects into the environment of economic theory that cannot be accurately characterized as phenomenon of market, where the economic aspect can be seen from the monetary prism, and there is a relationship of exchange. Thus, many themes related to the social sphere began to be analyzed within the traditional economic paradigm (BECKER, 1976). Some examples are crime rate and social interaction. Another, of vital importance, is that which addresses marriage or any other type of married union as was mentioned in Becker's work (1976). The analysis of this subject is of singular importance because starting from this point other economic phenomenon originates, such as population growth, participation of women in the labor market, inequality of income, natural selection and others.

Based on this, it is fundamental to know which forces motivate economic agents to enter or leave a marital relationship. From an economic point of view it would be possible to predict how the economic cycles would affect the demand for marriage. If, as Becker $(1976,1991)$ showed, market forces influence the forming or breaking up of marital unions, economic crises can be seen as periods where the demand for marriages is reduced, not to mention the exacerbation of the number of break-offs which generate an increase in the amount of family desegregation. As some research works show, family heritage is a decisive factor in many social phenomena, for example that of crime rate. Thus, broken relationships can provoke serious problems for society.

The objective of this work is to create an econometric model related to the breaking off of an estimated relationship based on data collected in the city of Brasilia (DF) in the year 2002, to observe how economic factors, and others such as family inheritance, social interaction, preferences, etc, act upon the phenomenon. Besides this introduction, section 2 presents a brief review of the literature where the analysis of marriage can be seen from the economic agent's rational viewpoint. Section 3 shows the database. Section 4 introduces the subject of the married union within the context of random choice by the agent. The states that an agent can assume in a relationship (single, cohabitation and married union) are defined here to discover in which ways the diverse factors can influence the change from one state to another - single to married, for example. Seen from this angle the proposal rests on the application of the logit multinomial model as a way to estimate the probability of state choice. In section 5 the econometric results of the multinomial model are presented. As we will be demonstrate later, economic factors wield great influence upon the end of a relationship, as well as upon the maintenance of the same. Finally, in section 6, the main conclusions of this research are presented.

## II BRIEF REVIEW OF THE LITERATURE

According to Becker (1976), the subject of marriage in modern society can be understood from an economic perspective. Here the need of the individual to relate is looked upon in much the same way as the desire to acquire any other market good. By hypothesis it is expected that the usefulness of each partner would increase, otherwise there would be no reason to begin the relationship. Although it is possible to observe that in various economies of market there is a variation in relation to the modus operandi of how the relationship is carried out or dismantled legally, it is generally verified that the union of couples occurs in an atmosphere of freedom of choice and with little restriction regarding leaving the relationship. These facts corroborate Becker's hypothesis (1976) regarding the phenomenon of the union being examined by microeconomic analysis.

Originally the subject of marriage was based on the theory of family production in which the utility did not depend directly on the goods and services offered on the market, but of those goods and services produced by each one of the members (MICHAEL and BECKER, 1973). Here goods cannot be traded on the market, just transferred to other members of the family. Based on this theory it is possible to demonstrate that the incentive for the marriage is due to the complementary services of the members. Something similar in the context of social science literature already appears in Winch (1958), but the apparatus proposed by Becker can demonstrate that monogamy is preferable to polygamy. Another important implication of Becker's original theory says that the increase of wages raises the incentive to form the wedding. That result is corroborated by Keeley (1977) who shows that when the schooling and other
variables are maintained constant, individuals with higher wages marry earlier.

An important point on the subject of complementary relationships is the fact that the men with different characteristics in relation to education, capital, race, weight, etc. choose women with similar characteristics. Finally, the model proposed by Becker (1973) demonstrates that the gain derived from marriage should be positively correlated to the income of the property. Nevertheless, the model does not specify that a certain effect exists due to the variation in the income of one of the couple's members.

More recently, new paradigms were incorporated into the analysis in the sense of taking not only the marriage into consideration, but also the breaking off of it. Among these, the theory of imperfect information can be used to explain divorce. Although agreeing with the hypothesis that marriage is characterized as a balance in a context of complete information, it finds support in data from the United States that show that $40 \%$ of all divorces occur in the first five years of marriage. This, according to some, shows that on the average the main reason a relationship ends is because one of the partners did not have full information concerning the important characteristics of the other. If the reason for the end of the relationship was due to some change in the structure of attributes of one of the individuals such as an increase of social prestige, it was expected that the divorce cases would appear after a long period, in a deepened stage of the marriage. Other important themes related to marriage are repeated in literature, such as the subjects of separation and stigma (FLINN and HECKMAN, 1980), marriage among heterogeneous groups (WILDE, 1980), etc.

Although the present study does not set out to deal directly with the subjects mentioned above, because this is an empirical and unpublished work in Brazil, it can throw light, although indirectly, on some of these points.

## III DATABASE

This section describes the database used in this work. The information contained in this study was derived from research carried out in Brasília in the year 2002. 1.591 people were interviewed ( 689 men and 902 women). The data were obtained through interviews in loco with the interviewees. The research basically tried to verify which variables can affect the end of a relationship. Thus a great part of the research consists of questioning the interviewee about whether a certain factor in the relationship constituted a reason for finalizing the relationship. Among the questions asked are subjects linked to unemployment, alcoholism, professional success, the parents' influence in the relationship, etc.

Nevertheless, the questionnaire presented questions concerning marital status, change in lifestyle after relationships, age, schooling, sex, etc. As one will be able to observe, it is possible to present a model that relates the variables of this study to a person's current marital status to show how such variables influence the change from married to single status. In this research three marital states were classified: single, cohabitation union and married. By cohabitation union we mean a union of a couple protected by law, but of inferior legal status to that of marriage. The single people's group here also includes those that had relationships broken off, such as the divorced, those separated etc.

It is assumed by hypothesis that the breaking off of a cohabitation relationship has a smaller cost than a break off of a marriage. Thus it is presumed that the number of elements needed to finalize a cohabitation union must be superior to the elements needed to finalize a marriage. As the objective of the work is to verify the determinants of the relationship among the agents, the idea behind the individual's inclusion as a single
person is mainly due to the fact that he is available for a new relationship and not necessarily to have never been married in the legal sense of the term.

Concerning the determinants capable of influencing a relationship, they can be placed in different categories linked to economic factors, family heritage, social interaction, preferences, tastes, etc. The complete description regarding the precise meaning and terminology of the variables used in this research is found in Enclosure 1, at the end of the work ${ }^{3}$.

With exception of the education and age variables, all the variables that are seen in the table are dummies. As can be observed in Appendix, the data are organized in four distinct manners, taking into account that the placement of a variable in a certain group incorporates a certain degree of arbitrariness ${ }^{4}$. The first group refers to the socioeconomic factors that can influence a relationship. This group consists of variables such as "Loss of Employment", "Accident", etc. Some observations can be made in relation to these variables. The variable "Age", by definition, almost enters as scale in the model because the older a person is, the greater the probability he/she will participate in a stable union. Nevertheless, "Age2" represents the loss of competitiveness concerning the possibility of reaching a stable union due to the obsolescence of human capital. "Age2" should present a negative correlation with the capacity to form a cohabitation union or even a marriage.

Also, here the first group finds information that acts more directly upon the agent's rational decision concerning the change of status in the relationship. We find information of the partner concerning unemployment, "Loss of Employment", "Professional Success", etc. to know if such socioeconomic status of the partner are considered motives for the end in the

[^1]relationship. Among the variables linked to socioeconomic factors we have information about the change which occurred after the union in relation to the person's economic conditions, "Great Life". These changes are related with the improvement or decline in material terms during the period of the relationship. Finally, we stand out the variables "Money" and "Disagree Money": the first one shows a situation which a person can consider the loss of income on the part of the other as a good reason for breaking off the relationship and the second one shows a situation which the existence of disagreement over how to spend money is considered a good reason for the couple to separate.

Following this we have the group regarding family heritage and social interaction. As was mentioned in the previous sections, the idea is to verify if such factors influence the person's decision in relation to the choice of the partner or maintenance of the relationship. Concerning family heritage, we have presented data which states that "Infidelity" is a good reason for ending a relationship. Social interaction is represented here by variables that show if the "Parents' and Friends' Opinions" about the partner in the relationship influence the person to maintain the relationship. The idea here, as was already illustrated, is that the individual stays married, not just to the partner, but also to the family.

Others factors can also explain the phenomenon studied such as those linked to the agent's tastes and preferences. Here information is presented to show if motives like "Fall in Love" and Sexual Attraction", cultural differences - "Culture", etc. can have an effect on the breaking off of a relationship. Finally, the last group refers to the catalytic factors, for example if "Alcoholism", "Change of City", etc., have influence in the breaking off of a relationship, etc.

## IV MODEL OF RANDOM UTILITY

In the previous sections we presented some facts regarding the determinants of relationships between people. The objective now is to try to empirically verify if it is possible to place married relationships within a theoretical apparatus consistent to the agent's economic rationality. The idea here, as already stated (BECKER, 1976), is that the agent decides to opt for demanding a new relationship in case the expected utility of the new one be superior to the utility that he enjoys currently. In this sense the basis for our argument is that a relationship should be considered a change of state according to the increase in the utility generated. It was shown that we have three states: single, cohabitation and married union. In this case, the proposal is to try to place the agent's choice of a model within the agent's random choice (SCHMIDT and STRAUSS, 1975). Next we will make a brief explanation of this method.

In the problem of random choice, the choice of the alternative or state $j, j=1, \ldots, J$; for the individual, $i, i=1, \ldots, I$ ; seeks to maximize the level of utility $U_{i j}$. Here the choice refers to which current state the relationship is in. Actually this model shows the impact that a variable has on the permanence or alteration of the individual's current state, because the model always takes a state as reference.

Keeping in mind that the information concerning the determinants of each choice of state is incomplete, $U_{i j}$ can be defined the following way:
$U_{i j}=V_{i j}+\varepsilon_{i j} \quad j=1, \ldots J, i=1, \ldots, I$,
where $V_{i j}$ represents its deterministic part and $\varepsilon_{i j}$, the random component.

The probability $P_{i j}$ that the individual chooses a certain alternative $j$ is equal the probability that $U_{i j}$ be the largest
utility among $U_{i 1}, \ldots, U_{i J}$. Denoting $x_{i} \in(1, \ldots ., J)$ as the choice made by the individual, we have then that
$\mathrm{P}_{\mathrm{ij}}=\operatorname{Pr}\left(\mathrm{x}_{\mathrm{i}}=\mathrm{j}\right)=\operatorname{Pr}\left(\mathrm{U}_{\mathrm{ij}}>\mathrm{U}_{\mathrm{ik}}, \forall \mathrm{k}=1, \ldots, \mathrm{~J}: \mathrm{k} \neq \mathrm{j}\right)$
$=\operatorname{Pr}\left(\varepsilon_{\mathrm{ik}}-\varepsilon_{\mathrm{ij}} \leq \mathrm{V}_{\mathrm{ij}}-\mathrm{V}_{\mathrm{ik}}, \forall \mathrm{k}=1, \ldots, \mathrm{~J}: \mathrm{k} \neq \mathrm{j}\right)$
Given the deterministic components of the functions of utility, $V_{i 1}, \ldots, V_{i J}$, this probability will depend on the suppositions concerning the distributions (or the differences) of the stochastic terms $\varepsilon_{i 1}, \ldots, \varepsilon_{i j}$. The deterministic component $V_{i j}$ is affected by different types of determinants and can be defined the following way:

$$
\begin{equation*}
V_{i j}=\alpha_{j}+x_{i j}^{\prime} \beta+z_{i}^{\prime} \gamma_{j} \quad j=1, \ldots \ldots, J, i=1, \ldots, I \tag{3}
\end{equation*}
$$

where $z_{i}$ represents the vector of variable attributes, $x_{i j}$ is the vector of characteristic variables, those that can vary for the individual according to the choice type; finally, the constant term $\alpha_{j}$ is given in relation to each alternative. In the present research there is no information of the type $x_{i j}$, so all the data are of the attribute type. In this case we have

$$
\begin{equation*}
V_{i j}=\alpha_{j}+z_{i}^{\prime} \gamma_{j} \quad j=1, \ldots ., J, \quad i=1, \ldots \ldots, I \tag{4}
\end{equation*}
$$

Given the characteristics of this model, the most appropriate way of estimating the parameters starts from the application of a multinomial logit model (GREENE, 1993), where

$$
\begin{equation*}
\operatorname{Pr}\left(Y_{i}=j\right)=\frac{e^{\beta_{j}^{\prime} z_{i}}}{\sum_{k=1}^{J} e^{\beta_{k}^{\prime} z_{i}}} \tag{5}
\end{equation*}
$$

In this model the estimated equations generate a set of probabilities for $\mathrm{J}+1$ choices for individual i. A way of removing this indetermination begins with the introduction of
normalization for the reference alternative as, for example, making the vector $\beta_{1}=0$. So we have

$$
\begin{equation*}
\operatorname{Pr}\left(Y_{i}=j\right)=\frac{1}{\sum_{k=1}^{J} e^{\beta_{k}^{\prime} z_{i}}}, \quad \text { to } j=2, \ldots, J-1 \tag{6}
\end{equation*}
$$

and

$$
\begin{equation*}
\operatorname{Pr}\left(Y_{i}=j\right)=\frac{e^{\beta_{j}^{\prime} z_{i}}}{\sum_{k=2}^{J} e^{\beta_{k}^{\prime} z_{i}}} \tag{7}
\end{equation*}
$$

With the method of maximum likelihood and non-lineal optimization, it is possible to obtain the estimates for the coefficients that appear in (6) and (7). As Greene (1993) showed, the interpretation of the coefficients of the equations above becomes difficult; however, it is possible to obtain the logs for J-1 reasons of the probabilities,

$$
\begin{equation*}
\ln \left[\frac{P_{i j}}{P_{i k}}\right]=\beta_{j}^{\prime} x_{i}, \text { where } \quad j=2, \ldots, J-1 \tag{8}
\end{equation*}
$$

Thus we always have J-1 equations from which some interpretation concerning the coefficients is obtained, which in the case above would give the idea of the effect about the probability of choice of the alternative $J$ in relation to alternative K due to a marginal change in the value of a certain variable. Another important fact in the context of the multiple-choice model is that from the point of view of estimation, it is useful that the reasons $P_{j} / P_{k}$ be independent of the other choices, which happens when the hypothesis of the disturbances are assumed to be independent. These are named "axiom of the alternative irrelevant" (MADALLA, 1998). This term is acceptable for the present case.

## V ECONOMETRIC RESULTS

Having presented the theoretical apparatus to deal with the subject of the random choice, where diverse unordered alternatives appear, the problem now becomes how to apply the multinomial model in the context of a married union. The idea here is to know how the agents' decision to keep up a relationship or not is influenced by the factors defined before. In this sense what shall be proposed is a study to determine the probability of a person being placed in one of the available alternatives: stay single, to opt by cohabitation or even marry.

Before we pass on to the analysis of the results, some considerations should be made. Models for women and men were estimated separately. This procedure seeks to detect if each of these groups has different rules of decision when faced with the option of beginning a relationship. The models were estimated in two ways: one which tried to include the largest number of variables and the other "restricted" one where only the significant variables of the first model appear. Of course, in the unrestricted model, specification problems such as multicolinearity, etc. were avoided as much as possible. One can observe that there is no significant alteration for the coefficients of the remaining variables in the restricted model. This attests to the consistency of the model. Finally, it should be mentioned that the heterogeneity between the individuals was controlled by their levels of education.

In the multinomial model the analysis of the results should be made comparatively to a certain reference alternative. The single state alternative was used as a base. In this case the regressions were estimated for the cohabitation and married states. Thus, the negative coefficient for a certain variable in the two equations means that the variable has an adverse effect on the probability of change from a single to a cohabitation union or married state. Otherwise such a result can be interpreted as a favorable effect on the permanence in the single state. Table 1 presents the results of the model.

As one can easily observe, both models present interesting results, displaying a certain distinction between the men's behavior and the women's, regarding status changes in the relationships. In relation to the economic factors, these were shown to be important for both sexes. In this context, there are two groups of variables: those that show a similar behavior for both sex and others variables that distinguish them.

For both sexes the obsolescence of human capital illustrated by "Age2" shows negative signs. In the two the cases the passage to a better life (variable "Great Life") has a positive effect on the permanence in consensual unions and married relationships. For men and women married the appearance of a new professional opportunity represented by the variable "New Job" seems to make a union possible.

However, the most of the variables associated with economic factors show a different behavior for men and women. For the men, "Loss of Employment" by the women is not considered an important factor as far as breaking off a relationship goes. The same behavior is not observed by women. An odd fact is that in the model estimated for married women the variable "Professional Success" shows negative sign. The opposite was expected to happen. It is possible here that the agent perceives from experience that the "Professional Success" of the other produces a certain "distancing" in the relationship and for that reason perceives this fact not as a reason but as expectation that the breaking off can happen. For the men, disagree by the women in respect how he spends his money, denote for the variable "Disagree Money" is not considered an important factor as far as breaking off a relationship goes. Conversely, for the married women, disagree by the men in respect how he spends her own money is considered an important factor as far as breaking off a relationship goes. For the variable "Money" there isn't enough motivation for the
women change of marital status. The same can't be observed by the men in the cohabitation marital status.

In what he/she refers to the social interaction, both models show that the cultural differences, "Culture", act negatively for breaking of the relationship. In the same line, the opinion contrary of the friends on him/her conjugate is a factor that acts negatively for breaking of the relationship as well, except for married woman. An odd fact is that the opinion contrary of the parents on him/her conjugate is a factor that acts positively the decision of maintaining the relationship. However, a bad relationship of the conjugate with him/her parents is a factor that act negatively for breaking of the relationship while for the women this factor in not significant. In this context, we can realize that social interaction are important factors concerning of the decision of maintaining the relationship.

Let us see now if the results can illustrate some thing of as the breaking of the relationship it suffers influence of the catalyzing factors. The fact of having to move for another city on the part of the other reason is only configured for separation on the part of the men. It is possible that that has relationship with the cost of opportunity of the change, since for the women it can be smaller than the one of the men. Curiously, the problem of "Alcoholism" is not a separation reason for both sexes. Finally, the invalidity of him/her conjugate is not only important in the permanence of the relationship for the cohabitation woman. For the men cohabitation, this problem is not a separation reason. Conversely, for married men and women, this fact is considered an important factor as far as breaking off a relationship.

As the sexual, feeling and physical appearance aspects it is interesting noticing that for both "Sexual Attraction" for other partner, lack of sentimental attraction ("Fall in Love") with the partner and depreciation of the physical appearance ("Beauty") of the partner are factors that contribute to change of marital
status. For men the conviction or just the suspicion on conjugal "Infidelity" by him partner are motive to change of marital status as well. Curiously, for the married women the suspicion on conjugal infidelity by her partner is a motive to continue the relationship meanwhile that for the cohabited women this fact is not significant. Other difference in the behavior between men and women is concerning the love, i.e., when a partner "Fall in Love" for other person. When the men "Fall in Love" it is a motive to change his status marital while for the women it isn't. However, as the end of love, the results show that for the women it is a motive to change of marital status meanwhile for the cohabited men it isn't. For the married men it is not significant.

## VI CONCLUSIONS

This work had as objective to throw light in the subject concerning the effect of economic factors on the stability of the marriage. As it was shown, such factors have effect on the end of a relationship, as well as in the maintenance. The results showed that the unemployment and loss of income act in way contrary to the stability of the union, while expectation of the elevation of the status social influence the formation of an union. The results also showed that the amount of elements that you/they are taken in consideration in the breaking decision is so much larger in the cohabitation union as in the marriage, corroborating the hypothesis that that elapses of the transaction cost to leave of the relationship to be smaller in the first alternative.

With relationship to the variables of control of the model that take into account factors of family inheritance, social interaction, etc, the obtained results show that such factors can act differently according to the state of the relationship. Besides, the effects of groups different from variables show to suffer
influence of the individual's sex. An important result is that the women are shown more sensitive to reasons of economic order that the men in the end of the relationship.

Referring to the analysis of the general results by sex differentiation, some important points can be emphasized. Men is more likely to leave a relationship than woman, since the model estimated for men (restricted model) presents a greater number of variables with a negative coefficient than the estimate for women. However, considering only economic factors women is more likely to leave a relationship than man. It means that the women suffer more influence from the economic aspects when breaking off a relationship than entering one. By exclusion, the men are more sensible to change the marital status when evolve catalyzing factors, social interaction aspects and sexual and feeling factors.

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## APPENDIX

| INDEPENDENT | Women |  |
| :--- | :---: | :---: |
| VARIABLES | Unrestricted | Restricted |
| Choice $=$ | $=$ CONS. UNION | $=$ CONS. UNION |
|  |  |  |
| Loss of | $-.6442102(0.000)$ | $-.650977(0.000)$ |
| Employment | $.0636137(0.601)$ | - |
| Accident | $.1013723(0.209)$ | - |
| New Job | $-.0019396(0.989)$ | - |
| Professional | $4 . .530052(0.000)$ | $4.536248(0.000)$ |
| Success | $.1892475(0.000)$ | $.1883134(0.000)$ |
| Great life | $-.0022595(0.000)$ | $-.0022465(0.000)$ |
| Age | $-.0440891(0.701)$ | - |
| Age2 | $0.1802379(0.062)$ | $.1574894(0.074)$ |
| Infidelity | $-.2065193(0.085)$ | $-.1967823(0.094)$ |
| Parents' Opinion | $-.3237374(0.000)$ | $-.3281595(0.000)$ |
| Friends' Opinion | $.1971981(0.014)$ | $.1960828(0.013)$ |
| Sexual Attraction | $-.825459(0.000)$ | $-.769931(0.000)$ |
| Fall in Love | $-1.202638(0.000)$ | $-1.229184(0.000)$ |
| Beauty | $-1.215576(0.000)$ | $-1.210716(0.000)$ |
| Affective Feeling | $.3666805(0.000)$ | $.3595987(0.000)$ |
| Culture | $.2717311(0.001)$ | $.2711938(0.001)$ |
| Alcoholism | $1.17022(0.000)$ | $1.208124(0.000)$ |
| Change of City | $.5635415(0.000)$ | $.5762348(0.000)$ |
| Money | $-4.091158(0.000)$ | $-4.080574(0.000)$ |
| Disagree Money |  |  |
| Constant |  |  |
| $\quad$ Choice $=$ | $=$ MARRIED | $=$ MARRIED |
| Loss of |  |  |
| Employment | $-.2748312(0.003)$ | $-.2387019(0.008)$ |
| Accident | $.3522924(0.000)$ | $-.4596786(0.000)$ |
| New Job | $-.4957679(0.000)$ | $.3416804(0.000)$ |
| Professional | $4.803973(0.000)$ | $-.4585481(0.000)$ |
|  | $4.80603(0.000)$ |  |


| Success | .3863572(0.000) | .3842488(0.000) |
| :---: | :---: | :---: |
| Great life | -.0039085(0.000) | -.0038889(0.000) |
| Age | -.2512412(0.011) | -.2516644(0.011) |
| Age2 | .4976003(0.000) | .5594976(0.000) |
| Infidelity | .0964803(0.401) | - |
| Parents' Opinion | -.5202274(0.000) | -. 5301817(0.000) |
| Friends' Opinion | .2688623(0.000) | .2745166(0.000) |
| Sexual Attraction | -.3102783(0.010) | -. $3249495(0.007$ ) |
| Fall in Love | -1.28385(0.000) | -1.295182(0.000) |
| Beauty | -.6024154(0.000) | -. $5845338(0.000)$ |
| Affective Feeling | .4269332(0.000) | .4310539(0.000) |
| Culture | .1474785(0.057) | .1516207(0.049) |
| Alcoholism | .5842336(0.000) | .5772454(0.000) |
| Change of City | -.1678094(0.040) | -.1487113(0.065) |
| Money | -7.815061(0.000) | -7.748226(0.000) |
| Disagree Money |  |  |
| Constant |  |  |
| Reference Group | SINGLE | SINGLE |
| OBS | 902 | 902 |
| Pseudo R2 | 0,272 | 0,265 |
| INDEPENDENT |  |  |
| VARIABLES | Unrestricted Men $\quad$ Restricted |  |
| Choice $=$ | $=$ CONS. UNION | $=$ CONS. UNION |
| Loss of | . 0920235 (0.430) | - |
| Employment | .4089711(0.002) | .4495045(0.001) |
| Accident | .1609339(0.109) | - |
| New Job | $1.226508(0.000)$ | 1.250136(0.000) |
| Professional | 23.11184 (0.000) | 23.17276(0.000) |
| Success | . 2551759 (0.000) | .2571294(0.000) |
| Great life | -. 0024955 (0.000) | -.0025217(0.000) |
| Age | -.3170243(0.021) | -.3116829(0.022) |
| Age2 | .644379(0.000) | .6221939(0.000) |
| Infidelity | -.255749(0.068) | -.254258(0.068) |
| Parents' Opinion | -.608996(0.000) | -.5914819(0.000) |
| Friends' Opinion | -.1.203162(0.000) | -1.220214(0.000) |
| Sexual Attraction | -.9125687(0.000) | -.9568301(0.000) |


| Fall in Love | .76687(0.000) | .8009452(0.000) |
| :---: | :---: | :---: |
| Beauty | -.9053272(0.000) | -.9170646(0.000) |
| Affective Feeling | . 2106623 (0.012) | .2223607(0.007) |
| Culture | -. 235908 (0.024) | -.2124645(0.037) |
| Alcoholism | -. 3040311 (0.016) | -. $3075355(0.012$ ) |
| Change of City | -. 1441157 (0.150) | - |
| Money | -5.830741(0.000) | -5.877504(0.000) |
| Disagree Money |  |  |
| Constant Choice $=$ | $=$ MARRIED | $=$ MARRIED |
| Loss of | -. $1647009(0.157)$ | - |
| Employment | -.220733(0.087) | -. $2407809(0.061)$ |
| Accident | .4681413(0.000) | .4649305(0.000) |
| New Job | $1.088476(0.000)$ | $1.132561(0.000)$ |
| Professional | 23.15166(0.000) | 23.1578(0.000) |
| Success | .5199762(0.000) | .5168839(0.000) |
| Great life | -.004908(0.000) | -.0048678(0.000) |
| Age | -.5395058(0.000) | -.5687466(0.000) |
| Age2 | .937608(0.000) | .9241707(0.000) |
| Infidelity | -.969674(0.000) | -1.007585(0.000) |
| Parents' Opinion | -.4066358(0.000) | -.4067639(0.000) |
| Friends' Opinion | -1.256069(0.000) | -1.257467(0.000) |
| Sexual Attraction | -.5395117(0.000) | -.5582565(0.000) |
| Fall in Love | .1169629(0.358) | - |
| Beauty | -1.063966(0.000) | -1.071744(0.000) |
| Affective Feeling | .6006671(0.000) | .6082664(0.000) |
| Culture | -.2112235(0.040) | -.1990962(0.051) |
| Alcoholism | .2302047(0.050) | .1785845(0.113) |
| Change of City | .0139701(0.886) | - |
| Money | -11.00202(0.000) | -10.82319(0.000) |
| Disagree Money |  |  |
| Constant |  |  |
| Reference Group | SINGLE | SINGLE |
| OBS | 689 | 689 |
| Pseudo R2 | 0,247 | 0,226 |

## ENCLOSURE 1 - DESCRIPTION OF THE DATA BASE

## Dependent variable

State $=$ variables that assume the following values: 0 for single, 1 for cohabitation and union and 2 for married.

## Variables linked to economic factors

Loss of Employment $=$ dummy that assumes value 1 if the person considers that the employment loss on the part of the other is a good enough reason for breaking off the relationship, 0 if not.

Money $=$ dummy that assumes value 1 if the person considers that the loss of financial income on the part of the other is a good enough reason for breaking off the relationship, 0 if not.

New Job = dummy that assumes value 1 if finding a new job on the part of the other is considered a good enough reason for breaking off the relationship, 0 if not.

Accident = dummy that assumes value 1 if the person considers a partner's disabling accident good enough reason for breaking off the relationship, 0 if not.

Disagree Money = dummy that assumes value 1 if disagreement over money matters (a partner disagree how the other partner spend money) is considered a good enough reason for breaking off the relationship, 0 if not.
Professional Success $=$ dummy that assumes value 1 if it is believed that the professional success of the other partner is considered to be a good enough reason for breaking off the relationship, 0 if not.

Age $=$ the person' age.
Age2 $=$ age to the square.

School = complete years of study.
Great Life $=$ dummy that assumes value 1 if the person's life improved a great deal in marital terms after the relationship, 0 if not.

## Factors linked to family inheritance and social interaction

Parents' Opinion = dummy that assumes value 1 if the parents' opinion is considered important to the continuation of the relationship, 0 if not.

Friends' Opinion = variable dummy that assumes value 1 if the positive opinion on the part of friends is considered to be fundament to the maintenance of the relationship, $\mathbf{0}$ if not
Infidelity = variable dummy that assumes value 1 if the person considers the no existence of infidelity fundamental to the relationship, 0 if not.

## Tastes and preferences

Beauty = dummy that assumes value 1 if the individual considers the deterioration in physical appearance to be a good enough reason for breaking off the relationship, 0 if not.
Sexual Attraction = variable dummy that assumes value 1 if the individual judges the sexual attraction for the other person in the relationship to be a good enough reason to break off the relationship, 0 if not.

Fall in Love $=$ variable dummy that assumes value 1 if the individual judges the lack of sentimental attraction for the other person to be a good enough reason to break off the relationship, 0 if not.

Affective Feeling = variable dummy that assumes value 1 if the individual considers that the affective feeling in a relationship to be fundamental in the relationship, 0 if not

Culture $=$ variable dummy that assumes value 1 if the person would be willing to break off the relationship if he/she judges that the cultural level of the another is not compatible, 0 if not.

## Catalyzing factors

Alcoholism $=$ dummy that assumes value 1 if the person considers alcoholism a good enough reason for breaking off the relationship, 0 if not.

Change of City $=$ variable dummy that assumes value 1 if the individual would not be willing to move to another city to maintain the relationship, 0 if not.


[^0]:    ${ }^{1}$ Catholic University of Brasilia (UCB)
    ${ }^{2}$ Institute of Applied Economic Research (IPEA)

[^1]:    ${ }^{3}$ See appendix
    ${ }^{4}$ The detailed description of each variable belonging to respective group is presented in the Appendix.

