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## "Cohabitation and the partnership context of first birth. A case study of Romania"

ABSTRACT

In many western European nations there have been dramatic recent rises in unmarried cohabitation and having children outside marriage. In western European nations, in the first stage cohabitation emerges as a deviant or avant-garde phenomenon practiced by a small group of the single population, whilst the great majority of the population marry directly. In the second stage cohabitation functions as either a prelude or a probationary period where the strength of the relationship may be tested prior to committing to marriage and is predominantly a childless phase. In the third stage cohabitation becomes socially acceptable as an alternative to marriage and becoming a parent is no longer restricted to marriage. Finally, in the fourth stage, cohabitation and marriage become indistinguishable with children being born and reared within both, and the partnership transition could be said to be complete. Once a certain stage has been reached all the previous types of cohabiting unions can co-exist.

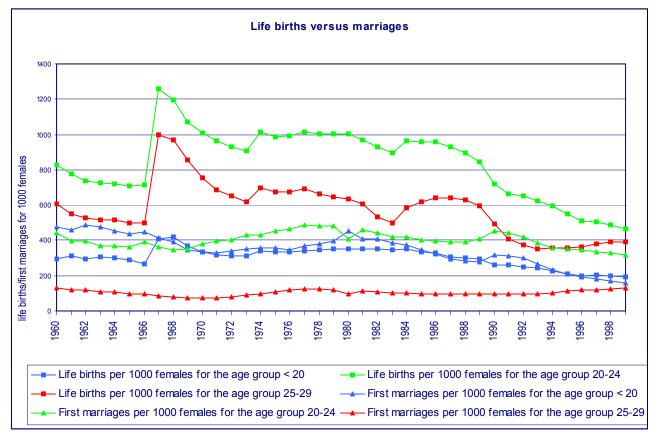
The main question of this study is : Are this rises in unmarried cohabitation and having children outside of marriage starting to be a new phenomenon in Romania? In what stage are we? We want to understand this development of family life . Also, the aim of this study is to find out what sub-groups of the population are more prone to cohabitation than others. Many studies about this phenomenon in West Europe show that young people live together as a prelude to, or as an alternative to marriage.

Our analysis includes an examination of type of first partnership, age at first partnership, duration of cohabiting unions, characteristics of cohabitants, and the context within which first child is born. We anticipate that those residing in metropolitan areas are more prone to cohabit. We think that being in full-time education also tends to inhibit union formation. We want to study if children who experience domestic violence, either he/she was bitten by one of his parents or relatives or he/she saw any conflict (physical or verbal) between his/her parents, may want to be more certain about committing to a permanent relationship and may take longer in testing the strength of the relationship via cohabitation before committing to marriage.

We also want to examine the partnership context of first birth. Romanian society is still an traditional one and therefore we expect that, despite of the increases in the proportions of births occurring outside of legal marriage, marriage continues to be the pre-eminent context for first births.

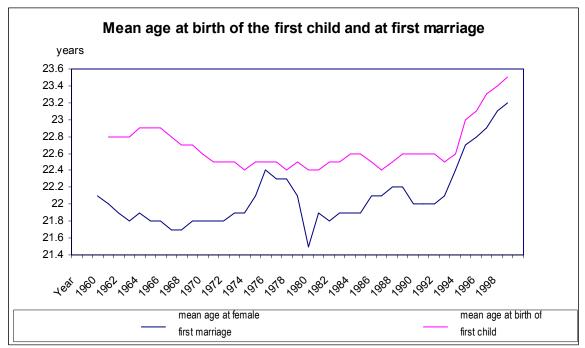
#### INTRODUCTION

In Romania, women start to have children at a much older age and age at first marriage and first birth is continuously increasing (see the next figure). The rate of childbearing has fallen well below the replacement level (in 1998 the fertility rate was 1.32 children for a woman ) and it was registered a gradual movement of fertility intensity from age 20-24 to the next one, aged 25-29 (29.8% of the total live-births in 1998 as against 21.2% in 1990). The nuptiality recorded an decrease in the proportion of the married women, while the proportion of the consensual unions, divorced women and single women is increasing.



Source: International Max Planck Research School for Demography, Rostock, Germany

As the result of the changes in the society, younger generations started to postpone not only establishing a family, but also to become parents (see next figure). Thus, many youths have a longer period of premarital sexual activity, a larger number of partners, and a higher risk of unwanted pregnancies. From the Reproductive Health Survey conducted in 1998 resulted that by the time women have two children, over 90% of women claim they want no more children.



Source: International Max Planck Research School for Demography, Rostock, Germany

## THE RISE OF COHABITATION

During the last period, it could been seen a growing number of children born outside the marriage (from 18.3% in 1990 to 24.1% in 1999). It is interesting to point out that majority of children born outside the marriage have young mothers (under 25 years old).

	1992	1993	1994	1995	1996	1997	1998	1999
Life births outside marriage	15	17	18.3	19.7	20.7	22.2	23	24.1

The Population and Household Census conducted in 2002 provides a perspective on the incidence of cohabiting and marital unions. Table 2 shows the distribution of the population living in consensual union by sex, age groups and civil marital status. It can be seen that up to the age 30, the cohabiting phenomenon is more predominant for the single (never married) persons. For the age group 30 - 54 there is a significant increasing of the number of those that are divorced and are living in consensual union while for those that are older than 54 there is an increasing of the number of widowed persons that are cohabiting. The number of the married persons that are living in consensual union is small for the all age groups for both sexes. For the age group 15-44, divorced female are more prone to cohabit than the male while for those older than 45 the situation is vice-versa. For the young never married persons (15-29 years old) the trend of male and female is similar. The never married male aged 30 and over are prone to cohabit than the never married women aged 30 and over.

Table 2. The distribution of the population living in consensual union by sex, age groups and civil marital status

Persons who	Sex	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	62-69	70-74	- % - 75 years
lives in consensual union		years	years	years	years	years	years	years	years	years	years	years	years	and over
Never married	Both sexes	98.92	97.47	91.98	77.81	67.09	59.97	54.72	52.22	49.21	46.64	42.25	49.47	35.65
	Male	98.97	98.68	95.54	84.20	73.83	66.39	59.76	56.18	52.46	49.67	43.48	39.23	34.77
	Female	98.91	96.66	88.03	70.63	59.10	52.06	48.70	47.49	45.24	42.99	40.72	38.75	37.08
Married	Roth sexes	0.69	0 74	111	1 59	2 01	2.12	2.01	1 78	1 44	141	1 14	1 02	0 79
5	Male	0.62	0.53	0.7	0.92	1.21	1.35	1.60	1.54	1.37	1.43	1.27	1.11	0.80
	Female	0.58	0.88	1.57	2.34	2.95	3.08	2.50	2.06	1.53	1.38	0.98	0.91	0.77
Divorced	Both sexes	0.42	1.65	6.72	18.93	27.51	32.12	34.48	32.54	29.21	24.09	20	15.60	11.23
	Male	0.35	0.71	3.61	14.39	23.9	29.87	34.47	34.77	33.22	27.71	23.17	17.02	12.20
	Female	0.43	2.28	9.53	24.02	31.74	34.87	28.85	29.88	24.33	19.73	16.11	13.67	9.67
Widow	Both sexes	0.05	0.12	0.47	1.65	3.38	5.70	8.77	13.43	20.12	27.84	36.59	44.33	52.31
	Male	0.04	0.07	0.12	0.46	1.01	2.35	4.15	7.49	12.92	21.17	32.06	42.63	52.21
	Female	0.06	0.16	0.85	2.98	6.18	9.97	14.29	20.55	28.89	35.88	42.17	46.65	52.46
Total	Both sexes	100	100	100	100	100	100	100	100	100	100	100	100	100
	Male	100	100	100	100	100	100	100	100	100	100	100	100	100
	Female	100	100	100	100	100	100	100	100	100	100	100	100	100
National Institute for Statistics – Population and	- Statistics – Ponu		Household Census - Romania	- SUSUA	Romania									

National Institute for Statistics – Population and Household Census - Romania

Table 3. Proportion of those who lives in consensual union into the total population for the same sex and age groups

Sex	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	62-69	70-74	75 vears
	years	years	years	years	years	years	years	years	years	years	years	years	and over
Both sexes	2.53	7.34	8.38	6.62	5.97	5.44	4.62	3.9	3.15	2.5	2.06	1.58	1.07
Male	0.8	5.79	8.63	6.95	6.45	6.05	5.1	4.3	3.65	3.05	2.56	2.14	1.77
Female	4.31	8.94	8.10	6.29	5.49	4.84	4.1	3.44	2.69	2.12	1.66	1.17	0.65
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National Institute for Statistics – Population and Household Census - Komania

As we can see in table 3, the proportion of the persons who lives in consensual union is aged 25-29 (8.63% of the total male population aged 25-29 are living in consensual union versus 8.10% of the total female population aged 25-29.). The proportion are high for the age group 20-24, too. 5.79% of the total male population aged 20-24 are living in consensual union versus 8.94% of the total female population aged 25-29.

For the tables 4, 5, 6 and 7, if we calculate the total for each row, we do not obtain 100 because of the decimals and because of those persons younger than 15 that are not included in this tables.

Sex	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 years
	years	and over											
Both sexes	5.01	15.42	17.10	15.42	8.51	9.45	6.60	4.73	2.67	2.23	1.56	0.91	0.67
Male	2.23	16.24	22.77	18.22	9.04	9.19	7.66	5.41	3.05	1.81	1.31	0.74	0.51
Female	11.48	24.84	19.94	14.30	6.42	6.14	5.49	4.02	2.27	1.91	1.38	0.78	0.54

Table 4. Distribution of the never married persons who lives in consensual union by sex and age groups

National Institute for Statistics - Population and Household Census - Romania

The young never married people (20-34 years old) are more prone to cohabit than the others single persons. The proportion of the never married male aged 25 and over who are cohabiting generally is higher than the proportion of the never married women aged 25 and over who are cohabiting. It start to be almost the same after the age 60.

Table 5. Distribution of the married persons who lives in consensual union by sex and age groups

Sex	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 years
	years	and over											
Both sexes	2.09	8.08	13.45	17.35	12.06	14.17	12.61	8.38	4.08	3.49	2.18	1.24	0.77
Male	0.99	6.18	11.87	14.23	10.49	13.28	14.57	10.56	5.68	5.16	3.58	2.06	1.29
Female	2.75	9.23	14.40	19.22	13.00	14.70	11.43	7.07	3.11	2.49	1.34	0.74	0.46

National Institute for Statistics - Population and Household Census - Romania

The married people who are living in consensual union have the highest proportions for the age group 15-54. If we are looking at the distribution by sex and age groups, we found two patterns: up to the age 44 the male population who are cohabiting has smaller proportion than female ones while for the age group 45 and over the male population who are cohabiting has higher proportion than female ones.

Table 6. Distribution of the divorced persons who lives in consensual union by sex and age groups

Sex	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 years
	years	and over											
Both sexes	0.11	1.42	6.14	16.31	13.09	16.97	17.11	12.13	6.53	4.73	3.04	1.49	0.86
Male	0.03	0.49	3.60	13.01	12.24	17.28	18.46	13.99	8.08	5.90	3.84	1.86	1.15
Female	0.20	2.37	8.73	19.67	13.95	16.65	15.74	10.23	4.95	3.54	2.21	1.12	0.57

National Institute for Statistics – Population and Household Census - Romania

In the case of divorced persons who lives in consensual union, the age group 30-49 have the highest proportion. After the age 45 it start to decrease. As in the case of married persons, if we are looking at the distribution by sex and age groups, we found two patterns: up to the age 40 the divorced male population who are cohabiting has smaller proportion than female ones while for the age group 40 and over the divorced male population who are cohabiting has higher proportion than female ones.

Sex	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 years
	years	and over											
Both sexes	0.04	0.27	1.13	3.57	4.03	7.64	10.92	12.56	11.29	13.73	13.95	10.66	10.15
Male	0	0.16	0.41	1.37	1.71	4.48	7.33	9.94	10.38	14.88	17.56	15.37	16.32
Female	0.05	0.34	1.58	4.93	5.48	9.61	13.16	14.19	11.85	13.01	11.70	7.73	6.30

Table 7. Distribution of the widow persons who lives in consensual union by sex and age groups

National Institute for Statistics - Population and Household Census - Romania

As we were expecting, for the age group 15-24, the proportions are very small. This is due to the fact that at this age there is no many widow persons. Up to the age 60, the widowers who are cohabiting has smaller proportion than widows ones. Over 60 years the trend is vice-versa.

In order to draw a picture of the cohabiting phenomenon, in the next section we examine five other background factors: ethnic affiliation, categories of the population (active versus inactive population; employment versus unemployment) and religion.

Overall, the proportion of the male who are cohabiting is 3.91% of the total male population while the proportion of the female that are cohabiting is 3.73% of the total female population. In Romania, the principal ethnic groups are as follow: Romanian, Hungarian, Gipsy, Ukrainian and German. If we are looking just at these five ethnic groups, the Gipsy minority have the highest proportion of the males cohabiting (18.73% of the total male population of the Gipsy ethnic group) and it is followed by German (4.25%), Hungarian (3.94%), Romanian (3.47%) and Ukrainian ones (1.50%). If we are looking at the smaller ethnic groups, Italian, Turkish, Hellenic and Serbian ones have the highest proportions of male who are cohabiting reported to their male population (18.64%, 13.79%, 5.47% and respective 5.05%). The Gipsy ethnic group has the highest proportion for the female who are living in consensual union, too. Thus, 19.13% of the Gipsy female population are living in consensual union while for the Romanian, Hungarian, Ukrainian and German ethnic groups we have 3.32%, 3.63%, 1.83% and respectively 2.81%. For the female population, Italian, Hellenic and Serbian ethnic groups have small proportions. Thus, 3.96% of the Italian female population are living in consensual union while for the Hellenic and Serbian ethnic groups we have 3.73% respectively 3.64%. The only exception is the Turkish ethnic group where 12.26% of the female population is living in consensual union.

The principal religions in Romania are as following: orthodox, catholic and reformatted church. An examination of these principal religions shows that orthodox female population aged 15 and over have the highest proportion of the persons cohabiting (4.58% of the total orthodox female population aged 15 and over).

The next table shows that 8.94% of the total female population from the age group 20-24 is living in consensual union. After the age 25, the proportion start to slowly decrease. If we study the inactive female population we see that the age group 25-29 has the highest proportion of the cohabiting inactive female (12.12%). For the same age group we found the highest proportion of the cohabiting unemployed women (7.24%).

Table 8. Proportion of the women who lives in consensual union into the total female population for the same age group and economical category

													- % -
Economical category	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	> 75
	years												
Female population who	4.31	8.94	8.10	6.29	5.49	4.84	4.13	3.44	2.69	2.12	1.66	1.17	0.65
lives in consensual union													
Active population	8.18	7.14	5.89	4.77	4.21	3.81	3.32	2.88	2.72	2.40	1.90	1.53	1.10
-employed	9.35	7.22	5.75	4.67	4.11	3.69	3.22	2.79	2.69	2.40	1.90	1.53	1.10
<ul> <li>unemployed</li> </ul>	5.74	6.76	7.24	5.94	5.42	5.08	4.51	4.38	4.35	-	-	-	-
Inactive population	3.54	10.68	12.12	9.75	8.73	7.22	5.51	3.90	2.69	2.08	1.63	1.14	0.64

## THE CONTEXT OF THE FIRST BIRTH

This section examines the factors that influence women aged 15-24 in having either a longer or a shorter duration between first intercourse and first birth. It provide us with new aspects in the lives of young women that have critical impact on the subsequent reproductive life cycle such as the length of the interval of time between first intercourse and first pregnancy that resulted in a life birth.

The study shows that there is a much stronger tendency for married women to have a shorter length between the first intercourse and the first birth than for the not married. The median duration for the first birth since first intercourse is around 21 months if the woman started as married and more than 76 months if she started as not married. After 3 years since their first intercourse about 79% of the not married, but only about 28% of married women are still waiting for their first child. After 6 years since the first intercourse almost half of not married women still do not have a child while in the case of married women only 10% do not have a child.

Also, it can be seen that women from the rural area have their first child at a faster pace than the women from urban area. Half of the urban women have their first life-birth after about 78 months while half of the rural women have their first live-birth after 55 months. Thus, after a duration of about one and half years 66% of the rural women still do nor have any child, while after 3 years 37% and after 6 years only 17% of the rural women are still waiting for their first child. In the case of urban women 91%, 76% and 52% still do not have a child after a period of one and half years, 3 years and 6 yers respectively since their first intercourse.

The use of contraceptive methods at first intercourse shows the tendency for those women that have used a contraceptive method to have a longer length between the first intercourse and first birth than women that did not use. The median duration for the first birth since first intercourse is longer for those women that did not use contraceptive methods (57 months) than for those that used (about 33 months). In the case of women who discussed/not discussed with their first partner about contraceptive methods is observed a similar pattern of life tables as in the case of information about use of contraceptive methods at first intercourse.

The influence of educational level at first intercourse on young adults' sexual behavior should be interpreted with caution because many young adults are still in school. As expected, the most educated women tend to postpone the time of the first birth. The less educated women tend to have the first birth sooner than the women with at least secondary education do. The median duration for the first birth since first intercourse is longer for those women who had high educational level at first intercourse (58 months) than for those that had lower level of education (about 25 months for those with less than secondary school).

There are significant differences between Gypsy and other ethnic groups. The median duration for Gypsy women is 29 months while for Romanian is 46 months and even longer for the others.

Table 9.	Percentage	change i	n the	estimates	for mo	dels c	of the	rate o	f entrv	into motherho	oh
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	Model 1	Model 2	Model 3	Model 4	Model 5
Rural	3.333	2.357	2.282	1.907	1.830
Married	*	3.757	3.627	3.254	3.366
Not use contraceptive methods	*	*	1.435	1.307	1.368
Less than secondary school at the moment of the first intercourse	*	*	*	4.920	5.218
Secondary school at the moment of the first birth	*	*	*	3.802	4.112
Not having abortions before first birth	*	*	*	*	1.932
Log-likelihood	-1008.261	-908.554	-900.784	-887.619	-867.370

Model 1= controlled for residency

Model 2= controlled for residency and marital status

Model 3= controlled for residency, marital status and use of contraceptive methods at first intercourse

Model 4= controlled for residency, marital status, use of contraceptive methods at first intercourse, and educational level at first intercourse

Model 5= controlled for residency, marital status, use of contraceptive methods at first intercourse, educational level at first intercourse and weather the woman ever had or not an abortion

We start the analysis with the question of how the place of residence has an effect on the length between the first intercourse and first birth. Model 1 which controls for place of residence has been chosen as the baseline for all models. Model 2 includes marital status at the time of the first intercourse. Model 3 introduces information about the use of contraceptive methods while model 4 includes educational level. The last model includes a variable that gives us information whether the woman had or have not had any abortion before the first birth.

As can be seen from Table 9, in the last model the risk of having a child is 1.83 times higher for rural women than for urban women. The result show that in this model the risk of having a child for a married women is 3.36 times higher than for a not married woman. In this model we can see that those women that did not use any contraceptive method at first intercourse have a 1.36 higher risk to have a child is 5.21 times higher for women with less than secondary school and 4.11 times higher for those with secondary school than those with more than secondary school. The high risk for those with less than secondary school could be because they are more likely to have less knowledge about contraceptive methods, they are less likely to use a contraceptive method at first intercourse and may be because their first intercourse is more likely to be unexpected. Whether or not a woman had an abortion before her first birth is significant in explaining transition to first birth. The results show that the interval between first birth. It seems that abortion is still an important factor in postponing the first birth. If we compare Model 4 with model 5 we can see that including the covariate regarding abortion before first birth, the importance of the level of education at the time of first intercourse is increasing.

For this study we used data from the last census, which was conducted in 2002, and from the Reproductive Health Survey conducted in 1999. Also we used data from Ministry of Public Health and the National Institute for Statistics.

This study uses life table method in the case of a single transition in order to calculate nonparametric estimates of the survivor function, the density function, and transition rates for duration given in a set of episodes. Life tables are very useful for comparison of the behavior of subgroups. We used log-rank and Wilcoxon tests for comparing the survivor functions and test if there are significant differences. Another method used for parametric estimation of survivor functions and its derivatives is the Kaplan-Meier, also called product-limit method. In order to control for covariates we applied piecewise constant exponential model because in our case the transition rate is not constant over the time (usually in the real life we can not find constant transition rate models), and because this model is able to include time-dependent covariates.

The main goal of this study is to provide policy makers and program managers with aspects about the new tendencies regarding cohabitation and childbearing outside marriage, in order to improve the existing programs and to develop new strategies regarding youths.

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