Leaving the parental home in Poland

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Abstract

This study compares trends in the process of leaving the parental home before and after the breakdown of the Communist regime in Poland. The hypothesis is made that dramatic changes in Polish society have led to significant alterations in the determinants of leaving home and tested by using data from the Polish retrospective survey carried out in 2001. With the help of piecewise linear event-history regressions the explanatory significance of demographic factors (the cohort, the number of siblings), social factors (the household composition), and economic factors (the occupational status of the parents, the region of residence) on the timing of leaving home are investigated. First results show that leaving home in Communist times was highly dependent on marital formation and education enrolment. In general, young people have been leaving home in order to set up new households. Our analyses will examine whether this pattern continues into post-socialist Poland or whether other factors have been influential.

Introduction

Leaving the parental home is considered a major event in the life course and in the transition to adulthood. Young people generally are expected to leave home once they reach adolescence. This move is linked with other events associated with the transition to adult citizenship, in particular with entering higher education or vocational training, marriage, or family formation. This study has three general aims. Firstly, it looks at the timing of leaving home. Secondly, it investigates the reasons for leaving home. Thirdly, it compares the process of leaving home with its determinants over two periods: before and after the breakdown of socialism in Poland.

The situation in Poland

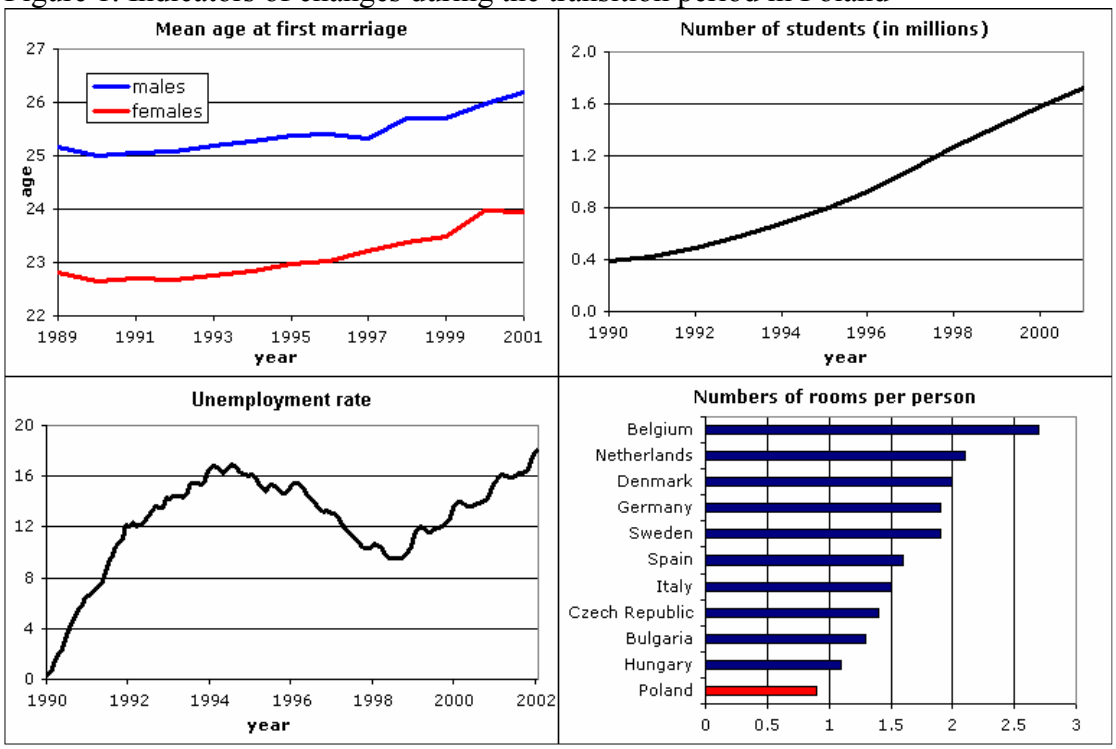
The socio-economic situation of young adults has altered significantly due to the collapse of the socialist system in 1989 and the ensuing dramatic economic and political changes. Young adults began to face a multitude of problems concerning the transition to adulthood, caused by unstable labor markets, rising unemployment, and unstable housing market conditions. The impact of these problems on leaving the parental home is not clear. Market instability has contributed to an increase of uncertainty concerning market opportunities. This uncertainty has been an underlying factor behind the postponement of family formation, the latter which remains the main reason for leaving home in Poland (Liefbroer and Frątczak, 1996). On the other hand, the social, economic, and political changes – especially the political ones during transition – have led to rising expectations among the population (e.g., as to easier access to education and new jobs on a market that is now new, i.e., free). As a result, young adults might have seen no reasons to postpone home leaving.

In Poland around 80% of people leave home before age 35. There is slightly more females (82% of them leave home) than males (around 77%) among this group. Three events are closely connected to leaving the parental home. The union formation[1], continuing education, starting employment is the main reasons for the nest leaving and they are responsible for about 95% cases of the investigated event. To illustrate the scope of changes I will present some basic statistics concerning aforesaid life domains. As one can see on the Figure 1, the mean age at first marriage increased

[1] The marriage formation is the main cause for leaving home (see Kowalska and Wróblewska 2001)

between years 1989-2001 by about 1.1 year for both, males and females. Thus we can expect the delay in the process of leaving the parental home. The same we can conclude after looking at the unemployment rate. Before 1989 there was no official unemployment and during next 12 years it exceeded 15%. On the other hand the rapid increase in the number of students in Poland (more then 4 times during 12 years) should lower the age of leaving home. The last part of Figure 1 illustrates problems with housing in Poland. In Poland there is the lowest rooms/person ratio in Europe and that fact has very important impact on leaving home decisions.

Figure 1. Indicators of changes during the transition period in Poland



Source: Polish Statistical Office; Domański and Ostrowska 2005

2. Theoretical considerations

The event of young people leaving the parental home is usually connected with other life-course events. A central issue is the timing of leaving home within a cohort. Usually, this is studied by means of survival functions and their synthetic measures, such as the median age or values at specific points in time (Billari at al, 2001). But it is not only age that determines leaving the parental home; also other life course events or even the expectation of other events may affect the decision to leave home. For instance, the expectation of marriage may lead individuals to perform a shift in another life domain (leaving home) already some time before this event occurs. On the other hand, one should not only assume an immediate effect of the event itself, but

also that the new status, which is achieved after the event, influences subsequent behavior. In addition, these effects may depend on the duration time elapsed after that event (Huinink and Konietzka 2000).

Haurin et al. (1993), having analyzed data from the National Longitudinal Survey of Youth 1987, have discovered a strong correlation between the individual's earnings potential and the propensity to leave the parental home in the US. Whittington and Peters (1996) have observed similar results. According to them, employment is a key factor in gaining residential independence and the lack thereof creates a higher residential dependence on parents. They have shown that in terms of residential independence, personal financial resources are important for young men more so than for young women. Similar behavior applies to education. Young people who enter education have access to scholarships, grants, and governmental loans, all of which allow them to acquire economic independence from their parents. However, continued education can be seen as at least a partial postponement of adulthood, which in turn can lead to a return to the parental home after completing the education career.

Buck and Scott (1993) have used the American Panel Study of Income Dynamics to analyze the patterns of young people leaving the parental home. They have shown that in 1980s young people during were less likely to leave the parental home in order to marry than in 1960s, but that although the proportion of marriage is declining among younger cohorts, there is no clear tendency for the proportion of those moving into independent living to increase. They also have found that "the family unit size has a more pronounced effect on delaying women's leaving" (Buck and Scott 1993: 870). Finally, there is a gender gap in the age of leaving – women leave home earlier than men. Moreover, the collage education of the father delays the overall age of leaving; however, this applies to daughters only, i.e., not to sons.

Goldscheider and Goldscheider (1998) have shown that an intact family is positively correlated with the age at leaving the parental home in the US. Children from the intact families stay at home longer than their peer from the disrupted families. Using the Swedish database TOPSWING (Total Population of Sweden, Individual and Geographical), Nilsson and Strandh (1999) have shown that educational and labor market careers play an important role as to young people's home-leaving patterns. Their results confirm earlier research showing that employed people are more likely to start living independently than are others. Moreover, those who are employed have a lower risk of returning whereas those in university education have a higher one.

Finally, the educational and labor market careers have a greater importance for women than for men in terms of structuring home-leaving behavior. These results contradict the findings of Whittington and Peters (1996), but this may be due to the effect of different cultures, i.e. Sweden and the USA.

Huinink and Konietzka (2000) have investigated the process of leaving the parental home in East and West Germany before German unification in 1990. They have found that in West Germany leaving the parental home was less linked to marriage, presumably due to a closer relation to new living arrangements (such as cohabitation, single and other alternative living arrangements). They have also pointed out that starting training is negatively correlated with the age at leaving home.

In an analysis of the Italy, Aassve et al. (2001a) have observed important gender differences concerning economic circumstances. For men, work and employment are important factors for leaving the parental home. Here, the stability of income seems to be a crucial factor for household formation. For women, employment does not play as an important a role; here partnership formation is more crucial.

Aassve et al. (2001b) have compared several countries as to the importance of the welfare state in young people's decision to leave the parental home. They have demonstrated that there are differences between welfare-state regimes. In conservative Southern Europe, the welfare regime model (e.g., in Italy), employment, and earnings are particularly important; in continental European countries earnings are not as important as employment. As to the social democratic regime model (e.g., Sweden) and especially the liberal market regime model (e.g., the United Kingdom), employment and one's own income play an insignificant role.

Another cross-country comparison concerning leaving the parental home has been carried out by Billari et al. (2001). Having analyzed 16 countries in Europe, and based on data from the Fertility and Family Survey, they have presented that the process of young European cohorts born around 1960 leaving home is a heterogeneous one. The highest homogeneity has been achieved by those countries which have progressed to a very advanced stage of the Second Demographic Transition (e.g., Sweden). Here, leaving home is a prerequisite for being able to make individualized choices rather than an individual choice itself.

Summarizing previous studies we can have discovered several patterns concerning the process of leaving parental home. The most common finding shows that the nest leaving is very close connected with another life course event, namely marriage, but

this relation has been becoming weaker and weaker, especially among Western societies. The international comparisons give the strong evidence for the existing division in Europe. In the Western European countries, which are in the advanced stage of the Second Demographic Transition, the process of leaving the parental home is more homogenous and it takes place at earlier ages. The opposite results were found for Southern European countries (Reher 1998, Billari et al. 2001, Aassve et al. 2001).

3. Data and methods

For my analysis, I use data from a survey carried out in 2001, namely "The evaluation of changes in attitudes and reproductive behaviors of young and middle generations female and male Poles and their influence on the process family and household formation and dissolution. The questionnaire of this survey is based to large extent on the FFS 1991 questionnaire, thus it makes the latter survey comparable with the old one. The basic objective of the 2001 survey was: evaluation of changes in attitudes and reproductive behaviors of young and middle-aged generations and projecting on these grounds future process of family, union and household formation and dissolution. The selected sample was representative for Polish society[2] and finally 3348 men and women aged 18-54 were interviewed.

Dependent variables

The dependent variable in all further models is timing of leaving the parental home. The analysis starts at age 15 for each individual and it lasts until a respondent leaves the parental home. People who stay at home after their 35th birthday are censored at that age. Separate models for males and females have been estimated in the analysis. This is because I want to control whether there are any gender differences regarding the process under study. Such segmentation has been used in previous research (e.g. Billari et al, 2001).

The analysis is divided into two parts: first, I will estimate the general model to investigate the main patterns of leaving home; second, I will estimate the competing risk model, with the reasons of leaving the parental home being the following:

[2] More details in Lednicki (2002)

I. *Partnership formation* (both in terms of marriage and cohabitation, with the latter reportedly being very rare)

   Many researchers have found evidence for a close correlation between marriage and leaving home (e.g., Billari et al. 2001, Baizán 2001, Kowalska and Wróblewska 2001). This finding is applicable to the past (and many years of it); however, in some Western Europeans countries the situation has changed since the 1970s. The two events began to diverge, and at the same time other lifestyles increasingly gained the attraction of young adults. However, until the early 1990s marriage was still the main reason for leaving home. Data from the 1991 FFS survey shows that in more than 70% of cases people left home due to marriage.

II. Education

   Young adults who went to university usually left the parental home if the distance justified such a step. Although the number of students has increased rapidly after the collapse of socialism in Poland, this has not caused a decline in the average age of leaving home. Parallel to this growth, the number of universities (mainly private ones) has increased. The concomitant decentralization of higher education has reduced the necessity of leaving home in order to study.

III. Employment or the desire for independence

   These two reasons for leaving home can be seen as the result of the "second demographic transition". Changes in value-orientations and norms have led to "individualism", a tendency that has become more pronounced. This development may accelerate the timing of the process under study. Very high unemployment rates may force young people searching for employment to look in parts of the country other than their neighborhood or residential region, forcing them in the end to leave home.

IV. Other reasons (e.g., conflicts in the family)

   This category includes mainly leaving the parental home due to intergenerational conflict in the family. Here, young adults usually leave much earlier than do others.

Independent variables

The data collected during the 2001 survey contains information about the numbers of respondent's siblings. This fact tells us how many children there was originally room for. The second indicator of home resources is the parental education level. It gives an overview on the socio-economic situation of the family. The better educated parents tend to have better paid jobs, thus they can provide more help to their children. To measure of availability of household services, the variable describing the mother's occupational status during the respondent's adolescence is included.

The Family structure and the conflict in the family are factors that previously have been shown to influence the leaving home pattern (e.g. Goldscheider and Goldscheider 1989, Aquilino 1990). The family structure is taken as a fairly indicator of previous family conflict.

To investigate whether the category of residence at age 15 has any impact on the nest leaving, such variable is introduced to the model. This covariate is divided into four categories: large cities (more than 500000 inhabitants), cities (100000-500000 inhabitants), small cities (less than 100000 inhabitants) and rural areas.

Since the education plays very important role in the process of leaving the parental home (e.g. Goldscheider and DaVanzo 1989, Nilsson and Strandh 1999), several variables capturing this effect are included, namely the current educational level, time since finishing vocational, high school and university and the dummy covariate describing the fact of being in the educational process. This set of variables is responsible for capturing the influence of personal resources and time after the end of the educational career.

Because this study focuses on the changes in the young people's behavior after the breakdown of the Communist regime in Poland, the calendar year as one of the time-varying covariates is placed into the model. Given the fact that among the youngest cohorts not many people left parental home at the day of the interview (see Figure 3), the period effect plays the more important role than the cohort effect. However, to present the influence of the latter one, the cohort variable is introduce in one of estimated models.

Models

When studying the sequencing of events, I used a piecewise linear model with months being the basic time unit. The models are estimated using the aML software package. The general mathematical representation of the model is as follows:

$$\ln h_i = y(t) + \sum_l z_l(u_{il} + t) + \sum_m \alpha_m x_{im} + \sum_n \beta_n w_{in}(t) + U_i ,$$

where

- t – is time: the age of the individual (since his or her 15th birthday),
- $\ln h_i$ – represents the logarithm of the hazard rate,
- $y(t)$ – the logarithm of the baseline intensity – baseline duration spline (piecewise linear function),
- z_l – the regression parameters for splines,
- α_m – the regression parameters for time constant covariates,
- β_n – the regression parameters for time varying covariates,
- U_i – represents unobserved heterogeneity on the individual level (it is the value of the i-th independent identically normally distributed random variable with the mean = 0) and the standard deviation σ.

In the second part of the empirical analysis, the competing risk model has been used. Such model is represented by four equations (each formula is responsible for one reason of leaving):

$$\ln h_i^{edu} = y^{edu}(t) + \sum_l z_l^{edu}(u_{il} + t) + \sum_m \alpha_m^{edu} x_{im} + \sum_n \beta_n^{edu} w_{in}(t) + U_i$$

$$\ln h_i^{job} = y^{job}(t) + \sum_l z_l^{job}(u_{il} + t) + \sum_m \alpha_m^{job} x_{im} + \sum_n \beta_n^{job} w_{in}(t) + U_i$$

$$\ln h_i^{mar} = y^{mar}(t) + \sum_l z_l^{mar}(u_{il} + t) + \sum_m \alpha_m^{mar} x_{im} + \sum_n \beta_n^{mar} w_{in}(t) + U_i$$

$$\ln h_i^{oth} = y^{oth}(t) + \sum_l z_l^{oth}(u_{il} + t) + \sum_m \alpha_m^{oth} x_{im} + \sum_n \beta_n^{oth} w_{in}(t) + U_i$$

The unobserved characteristics of the respondents have the same distributions in each formula above. If the unmeasured characteristics exist, they influence the risk of leaving the parental home due to every reason.

Plan of the empirical analysis:

- *Descriptive analysis*
- *Event-history analysis – the single transition rate model*
- *Event-history analysis – the competing risk model*

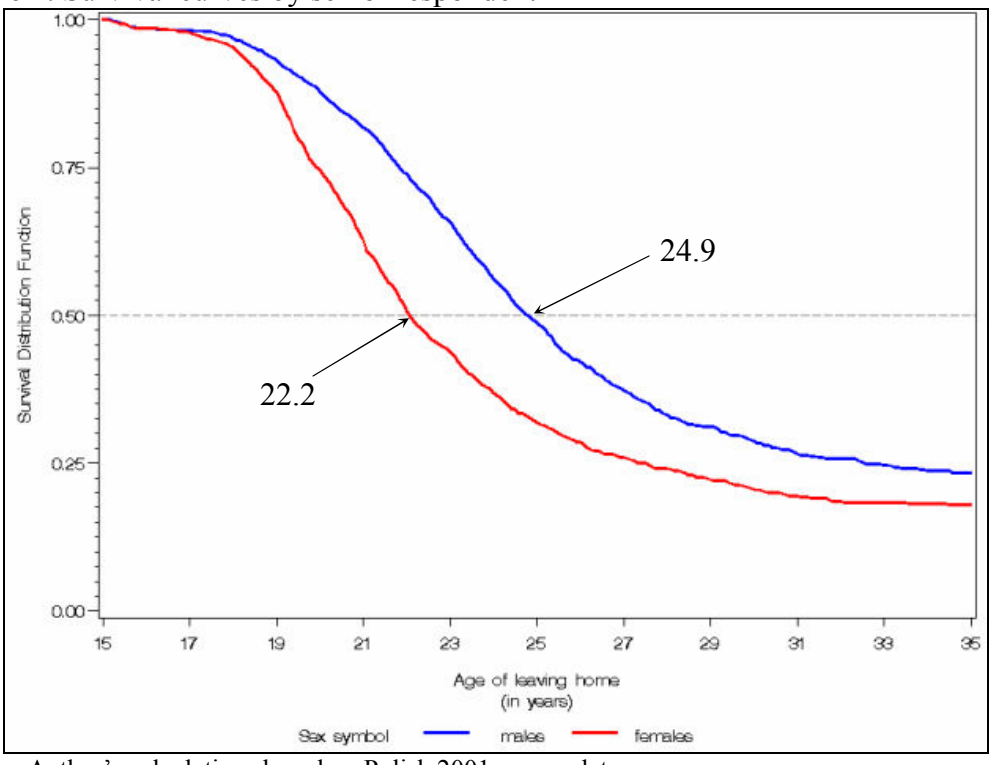
Descriptive analysis

To analyze the timing of leaving the parental home, I use synthetic measures derived from the Kaplan-Meier estimates of the survival functions to illustrate the differences between males and females in the timing of leaving the parental home.

The graph below shows the survival functions of leaving the parental home in Poland for both sexes. The spread between men and women is very substantial. The median age of leaving home is 22.2 years for women and 24.9 years for men. Furthermore, more than 18% of females and almost 24% of males never leave home. These values are very similar to results from Spain and Italy (see Billari et al., 2001) and illustrate that Poland follows the Southern European pattern of late-home leaving.

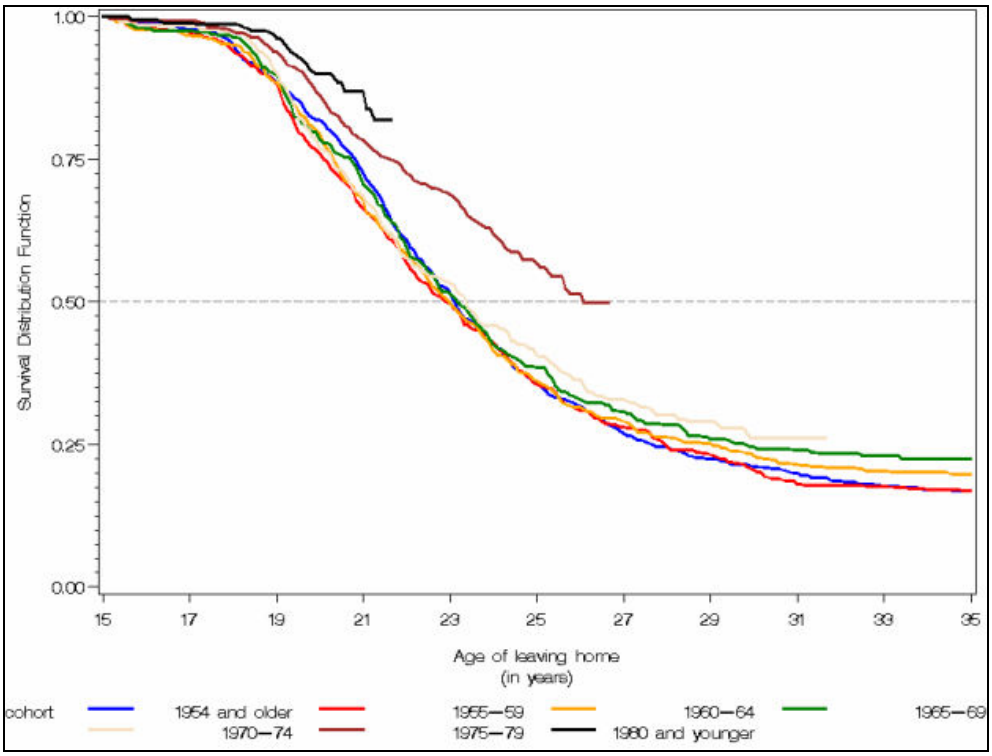
Figure 3 presents in addition the survival functions for the selected cohorts and shows to which extent the trajectory is changing between them.

Figure 2. Survival curves by sex of respondent



Source: Author's calculations based on Polish 2001 survey data

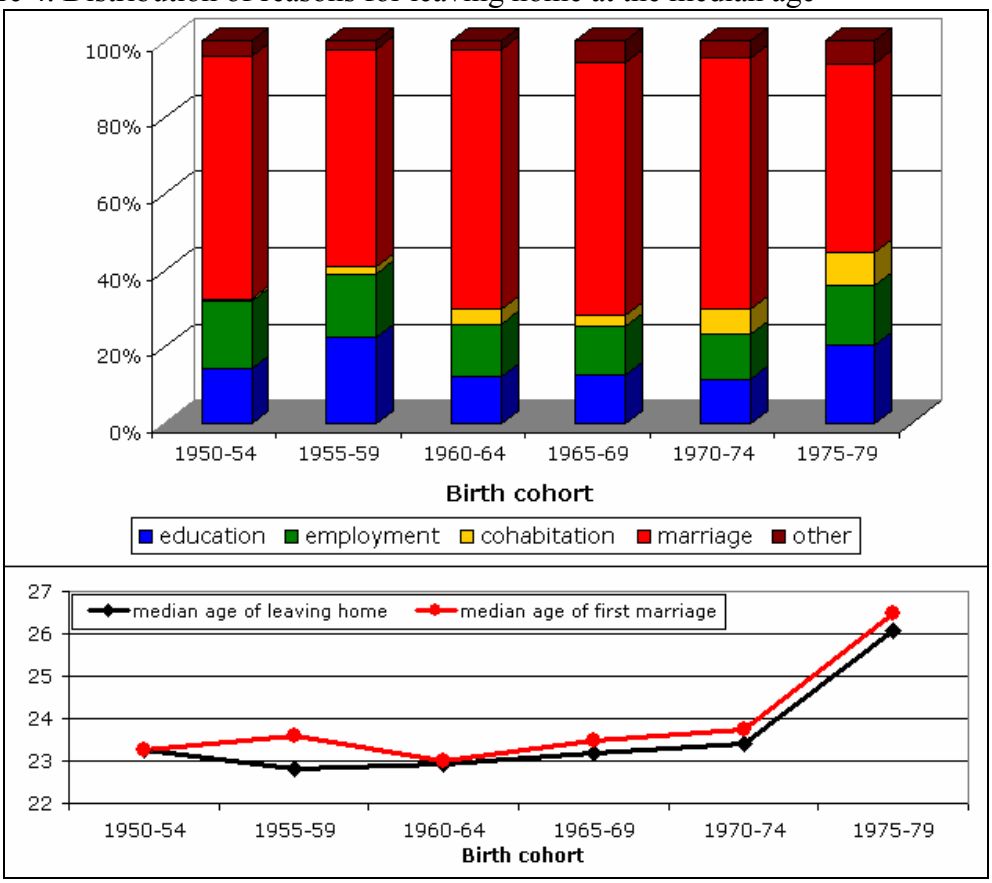
Figure 3. Survival curves for cohorts



Source: Author's calculations based on Polish 2001 survey data

There has not been any sign of a trend for most of the cohorts in Poland to delay leaving the parental home. A delay can be observed for people born after 1975, however. They entered the process of transition to adulthood in the beginning of the 90s, when Polish society was subject to deep and far-reaching changes. The delay can be observed in Figure 4, which shows the distribution of reasons for leaving the parental home at the median age. The median age at leaving the parental home has been chosen in order to include the youngest cohort (people born 1975-79). One can clearly see the change in the cohort presented last. Although marriage still remains a main reason for leaving home, its importance has declined by about 25% in favor of education and cohabitation.

Figure 4. Distribution of reasons for leaving home at the median age



Source: Author's calculations based on Polish 2001 survey data

Event-history analysis

a) The single transition rate model

Table 1 shows the distribution of respondents and the time of exposure among the variables included in the single transition rate model (in case of time-varying variables: as to the level of education and education enrolment, only the time of exposure is presented; the cohort variable will be presented in the second model in Table 2.

Table 2 shows the results of the piecewise linear exponential models (only the relative risk of time constant and time varying covariates).

Table 1. Descriptive statistics of the data

Factor									
	Level	Females (n=1680) Exposures time = 14141.8 person-years				Males (n=1582) Exposures time = 15513.6 person-years			
Cohort		Years of exposures	%	# of cases	%	Years of exposures	%	# of cases	%
	1954 and older	***4003.4***	*28.31*	***411***	*24.46*	***3900.5***	*25.14*	***365***	*23.07*
	1955-59	***2482.4***	*17.55*	***280***	*16.67*	***2877.1***	*18.55*	***264***	*16.69*
	1960-64	***2061***	*14.57*	***234***	*13.93*	***2406.6***	*15.51*	***207***	*13.08*
	1965-69	***1658.2***	*11.73*	***181***	*10.77*	***1739***	*11.21*	***155***	*9.80*
	1970-74	***1414.4***	*10.00*	***176***	*10.48*	***1724.1***	*11.11*	***167***	*10.56*
	1975-79	***1621.5***	*11.47*	***214***	*12.74*	***1886.2***	*12.16*	***222***	*14.03*
	1980 and younger	***900.9***	*6.37*	***184***	*10.95*	***980.1***	*6.32*	***202***	*12.77*
Siblings									
	0	**1346**	9.52	**149**	8.87	**1133.6**	7.31	**124**	7.84
	1	**3778.6**	26.72	**427**	25.42	**4187.7**	26.99	**436**	27.56
	2	**3415.3**	24.15	**429**	25.54	**4026.5**	25.95	**427**	26.99
	3 and more	**5601.9**	39.61	**675**	40.18	**6165.8**	39.74	**595**	37.61
Composition of household up to 15									
	With both parents	**771.1**	5.45	**97**	5.77	**601.5**	3.88	**69**	4.36
	Other	**13370.7**	94.55	**1583**	94.23	**14912.1**	96.12	**1513**	95.64
Education of father									
	Higher	**725.6**	5.13	**92**	5.48	**605.9**	3.91	**78**	4.93
	Secondary	**1688.8**	11.94	**212**	12.62	**1912**	12.32	**222**	14.03
	Vocational	**3938**	27.85	**480**	28.57	**4036.5**	26.02	**473**	29.90
	Primary	**7008.6**	49.56	**819**	48.75	**8047.5**	51.87	**733**	46.33
	None	**780.8**	5.52	**77**	4.58	**911.7**	5.88	**76**	4.80
Education of mother									
	Higher	**386.5**	2.73	**60**	3.57	**404.1**	2.60	**54**	3.41
	Secondary	**2309.2**	16.33	**285**	16.96	**2417**	15.58	**282**	17.83
	Vocational	**2613.1**	18.48	**330**	19.64	**2716.4**	17.51	**328**	20.73
	Primary	**7791.1**	55.09	**898**	53.45	**8894**	57.33	**824**	52.09
	None	**1041.9**	7.37	**107**	6.37	**1082.1**	6.98	**94**	5.94
Job of mother									
	Never worked	**2608.2**	18.44	**272**	16.19	**2236.9**	14.42	**236**	14.92
	Part-time	**2201.5**	15.57	**271**	16.13	**2407.7**	15.52	**254**	16.06
	Full-time	**9332.1**	65.99	**1121**	66.73	**10869**	70.06	**1084**	68.52
	Mother not at home	**112.5**	0.80	**16**	0.95	**76.2**	0.49	**8**	0.51
Place of residence up to 15									
	More than 500 thou.	**1019**	7.21	**122**	7.26	**799**	5.15	**90**	5.69
	100-500 thou.	**1568**	11.09	**213**	12.68	**1822.1**	11.75	**218**	13.78
	Less than 100 thou.	**4190.5**	29.63	**502**	29.88	**3860.5**	24.88	**440**	27.81
	rural	**7364.3**	52.07	**843**	50.18	**9032**	58.22	**834**	52.72
Education									
	Primary degree	**7408**	52.38			**7760.6**	50.02		
	Vocational degree	**2977.1**	21.05			**5333.7**	34.38		
	Secondary degree	**3557**	25.15			**2278.9**	14.69		
	University degree	**199.7**	1.41			**140.4**	0.91		
Education enrolment									
	No	**7899.4**	55.86			**9803.4**	63.19		
	Yes	**6242.4**	44.14			**5710.2**	36.81		

Source: Author's calculations based on Polish 2001 survey data

Table 2. Relative risks of leaving the parental home in Poland

Factor									
	Level	"Calendar year" model				"Cohort" model			
		Females		Males		Females		Males	
Cohort			+ select		+ select		+ select		+ select
	1954 and older					*1*	*1*	*1*	X
	1955-59					*1.13*	*1.23*	*0.91*	X
	1960-64					*1.14*	*1.29**	*0.76****	X
	1965-69					*1.07*	*1.13*	*0.79***	X
	1970-74					*1.16*	*1.30**	*0.69****	X
	1975-79					*0.82*	*0.81*	*0.41****	X
	1980 and younger					*0.62***	*0.62**	*0.34****	X
Siblings									X
	0	0.69***	0.61***	0.68***	0.52***	0.69***	0.61***	0.65***	X
	1	0.80***	0.73***	0.84*	0.77*	0.80***	0.73***	0.83***	X
	2	1.03	1.00	1.00	1.06	1.03	1.00	1.00	X
	3 and more	1	1	1	1	1	1	1	X
Composition of household up to 15									X
	With both parents	1	1	1	1	1	1	1	X
	Other	1.13	1.18	1.24	1.92**	1.12	1.15	1.24	X
Education of father									X
	Higher	1.21	1.26	1.26	1.71	1.21	1.27	1.28	X
	Secondary	1.17	1.27	1.01	1.07	1.16	1.26	1.00	X
	Vocational	1	1	1	1	1	1	1	X
	Primary	1.11	1.16	0.75***	0.64***	1.10	1.15	0.75***	X
	None	0.78	0.70	0.64**	0.54*	0.76	0.69	0.64**	X
Education of mother									X
	Higher	2.00***	2.24**	1.40	1.04	1.97***	2.22**	1.43	X
	Secondary	0.97	0.93	0.79	0.65**	0.98	0.95	0.80*	X
	Vocational	1	1	1	1	1	1	1	X
	Primary	0.94	0.93	0.84	0.74	0.97	0.95	0.84	X
	None	1.01	1.08	1.00	0.94	1.07	1.16	0.98	X
Job of mother									X
	Never worked	0.96	0.94	1.28***	1.38**	0.96	0.94	1.29***	X
	Part-time	1.02	0.99	1.01	1.14	1.01	0.99	1.01	X
	Full-time	1	1	1	1	1	1	1	X
	Mother not at home	1.48	1.85	0.96	0.75	1.52*	2.01*	1.00	X
Place of residence up to 15									X
	More than 500 thousands	1.18	1.17	1.27	1.90**	1.21	1.22	1.31*	X
	100-500 thousands	1.25**	1.26	1.30**	1.78***	1.27**	1.30*	1.28**	X
	Less than 100 thousands	1.04	1.05	1.41***	1.79***	1.05	1.06	1.41***	X
	rural	1	1	1	1	1	1	1	X
Education									X
	Primary degree	1	1	1	1	1	1	1	X
	Vocational degree	1.04	1.00	1.32***	1.44**	1.01	0.96	1.31***	X
	Secondary degree	1.19*	1.11	1.84***	2.24***	1.17	1.08	1.85***	X
	University degree	1.40	1.00	2.23***	1.99**	1.27	0.89	2.25***	X
Education enrolment									X
	No	0.27***	0.23***	0.32***	0.23***	0.27***	0.23***	0.33***	X
	Yes	1	1	1	1	1	1	1	X
SE			0.96***		1.58***		0.95***		X

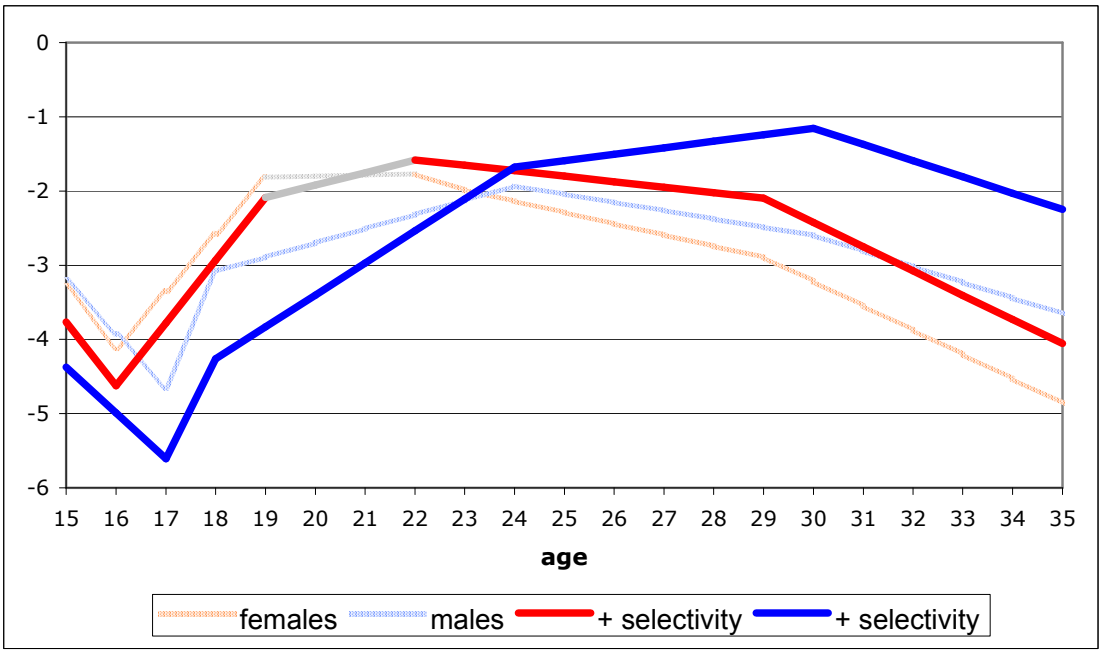
Note: *≤0.1; **≤0.05; ***≤0.01

Source: Author's calculations based on Polish 2001 survey data

The e*ffect of age ("Calendar year" model)*

The variable 'age' is chosen as baseline intensity, which is a standard assumption in research on leaving the parental home. It is estimated as a duration spline shown in Figure 6.

Figure 6. Log-baseline intensity (logarithm of hazard function) – after controlling for unobserved heterogeneity



Source: Author's calculations based on Polish 2001 survey data
Note: Slopes not significant are marked in grey

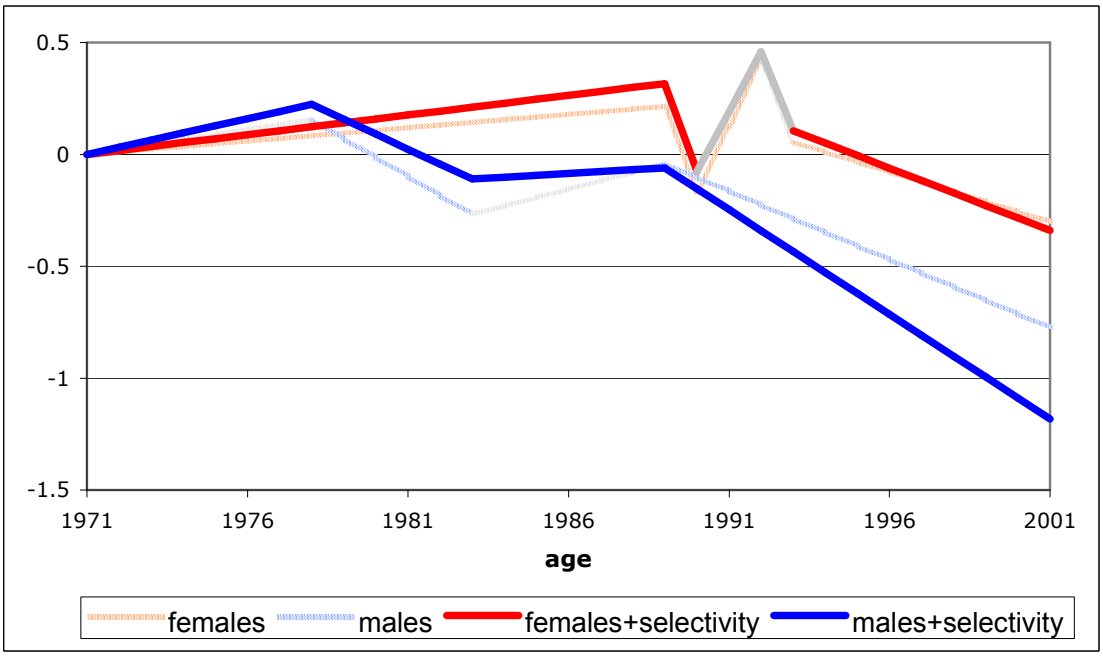
The results from the model show that women leave home earlier than men – up to age 24 the intensity among females is higher than for males. For both sexes there is a rapid growth period between ages 16-18(19). After controlling for unobserved characteristics (see Figure 6), the pattern of the hazard function for women remains the same. A difference applies to men, though; some unmeasured features lower the hazard of leaving home when aged 24-30. This effect will be investigated to greater detail in the next part of this analysis.

The effect of period (calendar year)

After introducing a model representing unobserved heterogeneity, we note that there are no changes in the patterns. The only differences are those between the two sexes. Starting from 1971, there is a positive effect for both sexes. As to females, the positive effect continues to hold up to 1989. For the next three years one can observe rapid changes (however, only in the model that does not include selectivity), followed by a steady decline in the trend from 1991 onwards. The period influence on males is

slightly different: the first change in the pattern, i.e., a decline, appears around 1978, at a time when the country was swept by a large wave of strikes. The decline accelerated when marshal law was in operation (1981-83). From 1983 until the end of Socialism there was no period effect. There follows a negative trend, i.e., showing a delay in the process of leaving home.

Figure 7. Calendar year spline – without controlling for unobserved heterogeneity



Source: Author's calculations based on Polish 2001 survey data
Note: Slopes not significant are marked in grey

The effect of time constant and time varying variables

The results from Table 2 support the hypothesis about importance of parental resources on the leaving home decision – the more individuals a family has to share resources, the sooner they start to live on their own. Young people from families with three and more children have a higher relative risk of leaving home than the respondents from smaller families. This division applies to both gender groups.

Surprisingly, living with an intact family has almost no effect on the transition under study. After controlling for selectivity, being of a single parent family increases the risk of leaving home almost twice, but this applies only to males. Intergenerational conflict is probably the main reason for leaving, the former may be due to the absence of a father (children usually stay with their mothers, but this may be a reason to leave the parental home especially for boys).

According to expectations, the parental education level has a positive influence on the timing of leaving home (i.e., higher-educated parents increase the probability of this event). Moreover, we can observe strong gender differences: highly educated mothers increase the risk of leaving home only as far as daughters are concerned whereas fathers with lower education decrease the risk. The latter, however, only applies to sons.

Interesting results are obtained when looking at the variable 'area of residence'. Here we can see a clear correlation for males: the larger the area of residence, the higher the risk of leaving. This effect is even more pronounced when we control for selectivity. The size of the city of residence up to age 15 influences the risk of leaving home to a much larger extent. This finding supports the traditional role that young farmers' sons have been playing in Poland: they have been staying in the parental home in order t to take over the responsibilities of the head of family sooner or later. For females, this variable has no significant effect.

We find a similar pattern for education. While the level of education matters a lot to men, there is hardly an effect as to women. This is to some extent unexpected, because, according to previous research (see Billari et al., 2000) Poland together with Hungary, Spain, the Czech Republic, and Italy are countries where young people leave home less frequently before having completed education. The relative risk of leaving the parental home is higher for people with higher education – it suggests that young people prefer to stay in the parental home until they have finished their education. This is partially confirmed by the last variable – education enrolment. Being in education decreases the risk of leaving home by around four times.

In both "calendar year" models, the random variable representing unmeasured characteristics of the respondents is significant. Especially for males the presence of this variable in the model changes the results regarding the family composition up to age 15. Possibly a particular group of males leaves the parental home earlier when one of the parents is permanently absent. In this model, however, one cannot identify this group.

The cohort effect

There are strong cohort effects on leaving the parental home, but they apply only to men. The youngest cohort has the lowest risk. It means that males born around 1980 are leaving their parental home later than older ones. For women, the cohort variable

is significant only after the introduction of unobserved heterogeneity on the individual level (for men, this was not possible – the likelihood of the new model could not be found). Nevertheless, the trend in this covariate is not clear.

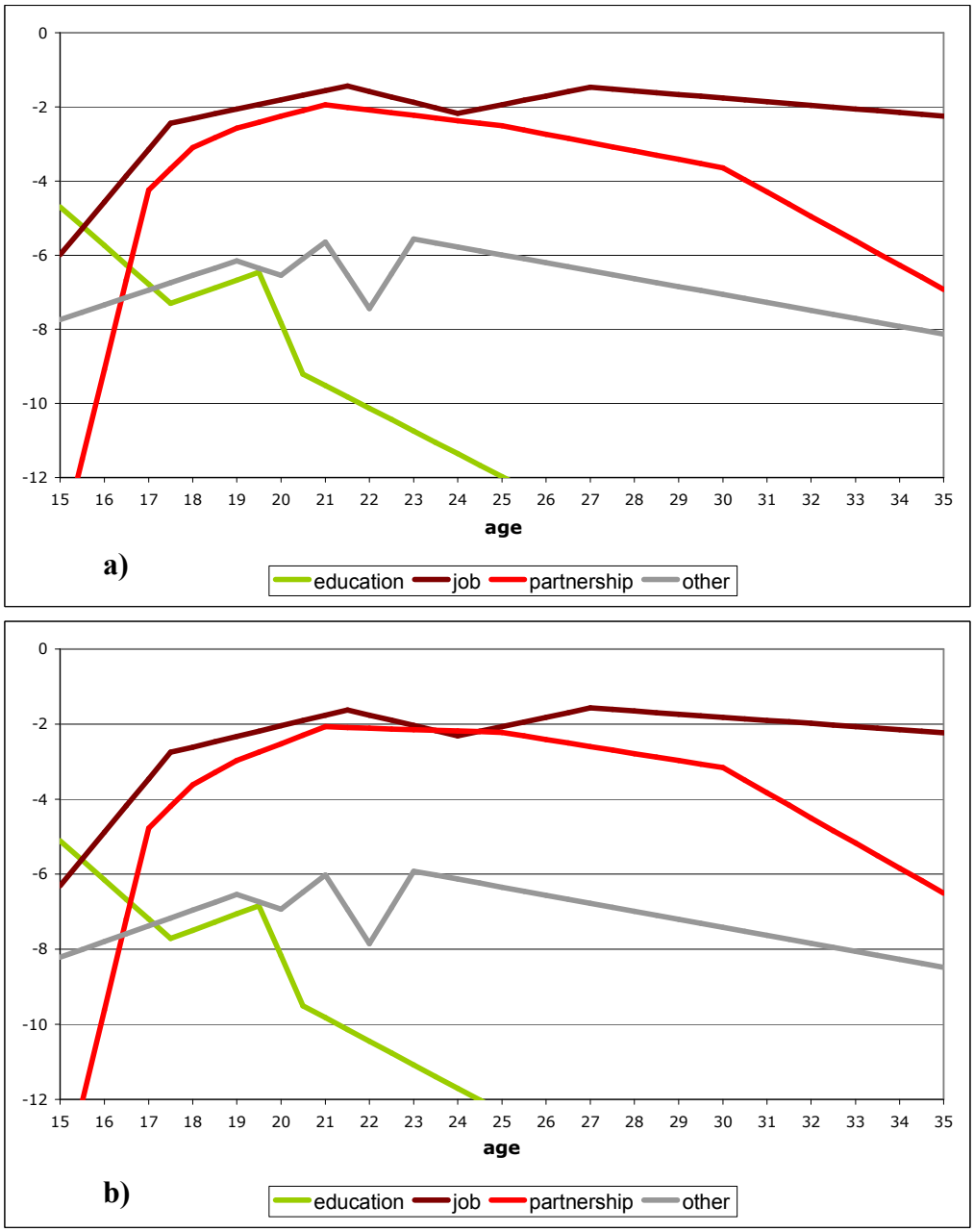
b) The competing risk model

The second part in the empirical section of the paper looks at the competing risk model. In order to achieve a more detailed analysis of the process of leaving the parental home, four destination states were introduced (see pages 5-6). Having done this, the unobserved heterogeneity factor applies only to the model for females.

The effect of age

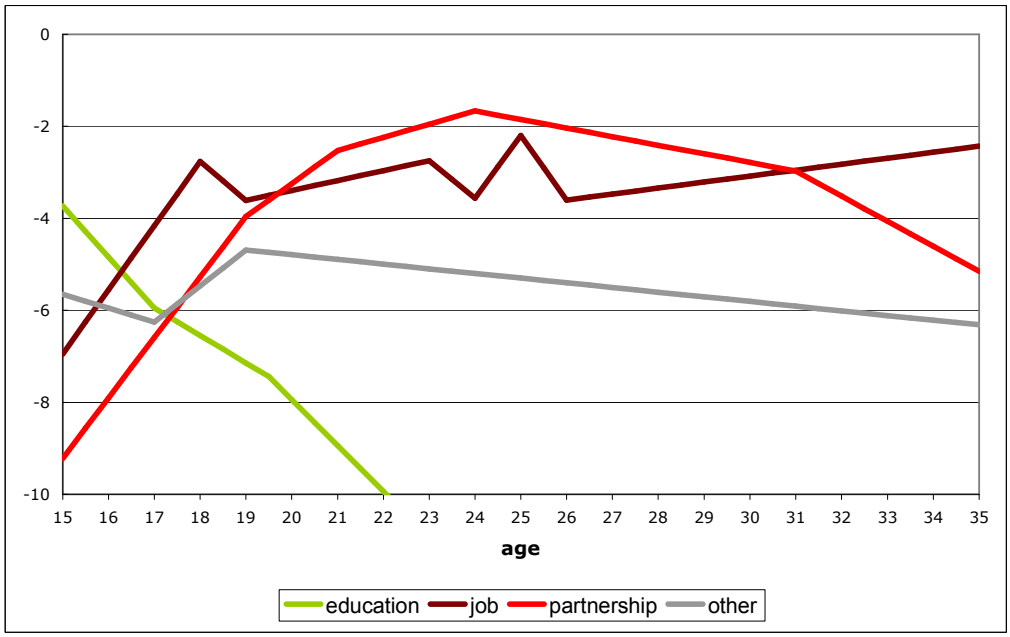
There is almost no change in the patterns of leaving the parental home after introducing unobserved heterogeneity to the models. As to the early ages one can observe a rapid increase in the hazard for two reasons: partnership formation and employment, while there is a slow decrease as to education. Between ages 20-25, the intensity of leaving home reaches a maximum – this is when most women leave the parental home. After the 25th birthday, the intensity starts to decrease. The patterns for males are similar, but for the first period (which represents an increase in the hazard of partnership formation) the elevation is not as rapid and thus lasts a few years longer. This is an expected result because a similar difference is observed in the age at first marriage, and marriage in Poland contributes to more than 90% of partnerships.

Figure 8. Log-baseline intensity – females



Source: Author's calculations based on Polish 2001 survey data
Note: a) model without unobserved heterogeneity, b) model with unobserved heterogeneity

Figure 9. Log-baseline intensity – males

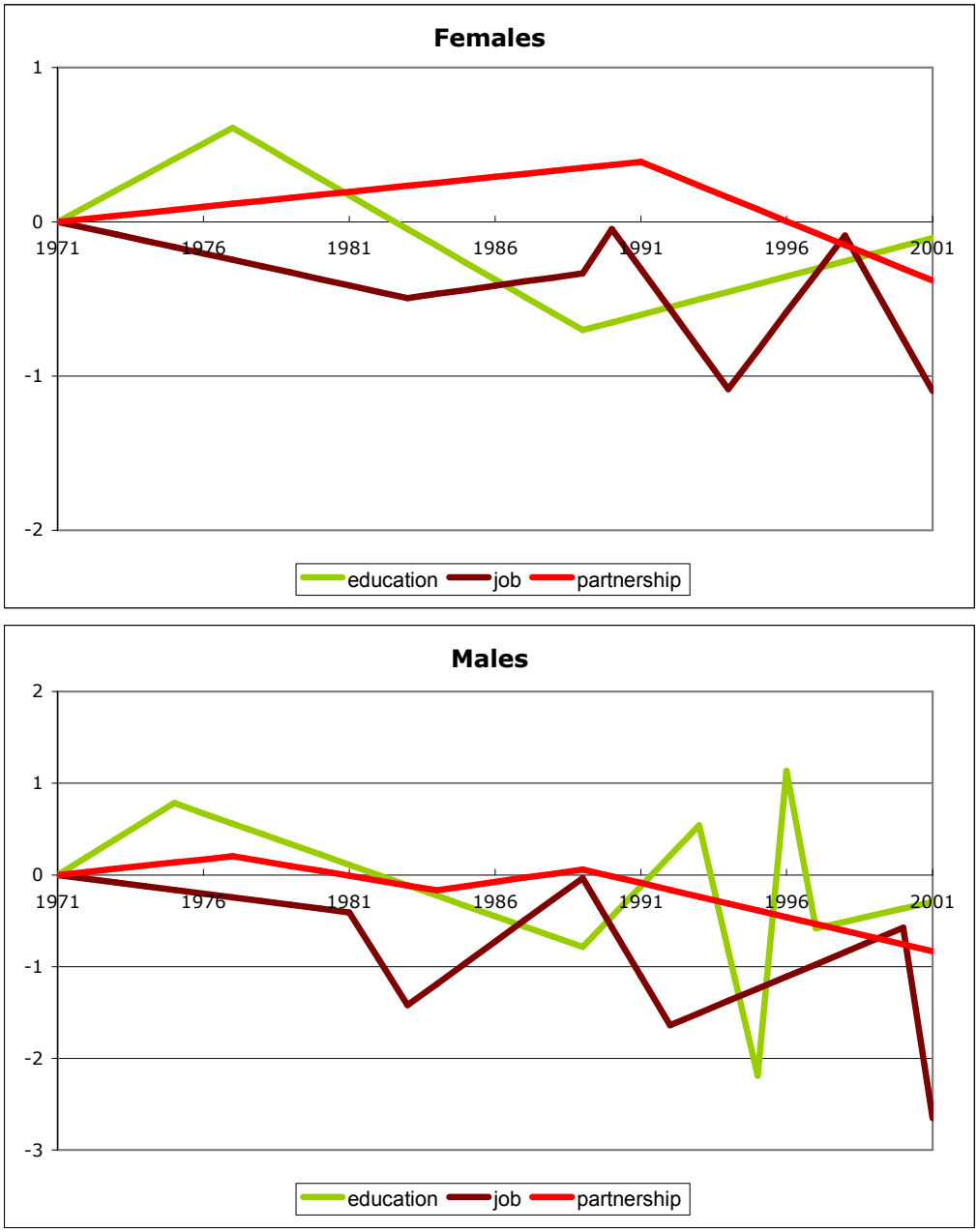


Source: Author's calculations based on Polish 2001-survey data

The effect of period (calendar year)

As the political and economic changes in Poland have influenced all people at the same time, I focus my analysis on the period effect. The cohort variable is excluded. The analysis includes three main reasons for leaving the parental home: partnership formation, employment, and education. The period effect on the first reason is similar for both sexes. We can observe that after the breakdown of Socialism the risk of leaving home due to partnership formation began to decline, mainly due to increasing general uncertainty, and this applies also to leaving home for reasons of employment. . Only in case of education there is an opposite trend. This is closely connected with easier access to universities after 1989. The effect is constant for women, while there is relatively large amplitude for men. As to the last reason, namely employment, the trend seems to follow economic cycles and is the same for both sexes.

Figure 10. Calendar year spline



Source: Author's calculations based on Polish 2001 survey data

Table 3. Relative risks of leaving the parental home in Poland – competing risk models

		Females								males			
		Education		job		partnership		other		education	job	partnership	other
			+ select		+ select		+ select		+ select				
siblings													
	0	0.85	*0.77*	0.46**	*0.43***	0.76*	*0.71**	0.78	*0.79*	0.86	0.27**	0.77	0.51
	1	1.39	*1.34*	0.50***	*0.45****	0.85*	*0.79**	0.59	*0.58*	0.96	0.67	0.88	0.31
	2	1.36	*1.38*	0.80	*0.77*	1.07	*1.05*	0.64	*0.65*	1.22	0.72	1.08	0.79
	3+	1	*1*	1	*1*	1	*1*	1	*1*	1	1	1	1
having intact family at age 15													
	yes	1	*1*	1	*1*	1	*1*	1	*1*	1	1	1	1
	no	1.57	*1.59*	1.19	*1.24*	1.09	*1.09*	1.54	*1.65*	0.85	2.56***	0.87	5.44***
education of father													
	higher	3.14***	*3.05***	1.19	*1.20*	0.94	*0.92*	1.09	*1.04*	3.24**	1.07	0.87	0.59
	secondary	2.55**	*2.63***	0.92	*0.96*	1.03	*1.08*	1.03	*0.94*	1.83**	0.95	0.89	0.80
	vocational	1	*1*	1	*1*	1	*1*	1	*1*	1	1	1	1
	primary	2.05**	*2.03***	0.84	*0.86*	1.10	*1.12*	0.61	*0.59*	0.75	0.81	0.75**	0.58
education of mother													
	higher	2.76**	*3.09**	2.73*	*2.99**	1.15	*1.11*	1.03	*1.05*	1.38	1.17	1.28	0.74
	secondary	1.69	*1.76*	0.87	*0.85*	0.87	*0.81*	0.59	*0.55*	0.88	1.19	0.69**	
	vocational	1	*1*	1	*1*	1	*1*	1	*1*	1	1	1	1
	primary	0.60	*0.62*	0.92	*0.87*	1.01	*1.03*	0.73	*0.74*	0.93	0.85	0.78*	
job of mother													
	never worked	0.90	*0.92*	1.08	*1.11*	0.94	*0.92*	1.35	*1.34*	0.90	1.44	1.29**	2.14
	part time	0.72	*0.72*	1.47*	*1.54**	0.95	*0.92*	1.66	*1.69*	0.70	1.12	1.01	1.91
	full time	1	*1*	1	*1*	1	*1*	1	*1*	1	1	1	1
Education level													
	primary	1.53	*1.57*	0.30**	*0.29***	0.97	*1.00*	2.68*	*2.85**	0.41	0.85	0.76**	1.33
	vocational	1	*1*	1	*1*	1	*1*	1	*1*	1	1	1	1
	secondary	20.6***	*22.1****	0.98	*0.92*	0.70*	*0.58***	1.42	*1.43*	43.42***	2.15	0.59*	1.76
	higher					1.81	*1.31*	3.44	*3.75*		3.45	0.79	
Education enrolment													
	yes	0.09***	*0.09****	0.37***	*0.36****	0.39***	*0.36****	0.17**	*0.17***	0.06***	0.22***	0.85	0.77
	no	1	*1*	1	*1*	1	*1*	1	*1*	1	1	1	1
Region of residence													
	more than 500 thousands	0.47	*0.51*	0.61	*0.55*	1.47**	*1.59***	0.84	*0.85*	0.69	0.67	1.39*	3.03**
	100 - 500 thousands	0.98	*0.95*	0.74	*0.70*	1.51***	*1.65****			0.97	1.19	1.32**	
	less than 100 thousands	1.32	*1.30*	0.71*	*0.68**	1.10	*1.12*	0.65	*0.65*	1.96**	1.38	1.31***	1.35
	rural	1	*1*	1	*1*	1	*1*	1	*1*	1	1	1	1

Source: Author's calculations based on Polish 2001survey data; Note: *≤0.1; **≤0.05; ***≤0.01; standard deviation σ of normally distributed random variable in the model with representation of unobserved heterogeneity equals **0.91**

The effect of time constant and time varying variables

The more detailed analysis supports the previous result concerning parental resources. Young people from crowded households leave home earlier than their peers with one sibling do. A clear difference can be noted between families with up to 2 children and the rest. Especially in case of leaving home due to employment, this division is very pronounced; males have 4 times higher risk of leaving the parental home than females. Surprisingly, there is no significant effect for education.

Applying the competing risk model, I have found that not having an intact family matters. This fact increases the risk of leaving home for males for employment (2.5 times) and other (5.5 times) reason. The latter means that young men from incomplete families are more susceptible to conflicts with a single parent. In this model, unobserved heterogeneity is not significant and it seems to confirm my previous hypotheses.

In Table 3 one can see the clear trend that parental education influences children's leaving home. Generally, the educational level of father is more important as to this behavior, but there is an interesting effect of mother's education on the behavior of their daughters. Higher education (university level) of mothers enhances the risk of leaving home for reasons of education and employment by 3 times. A father's vocational education strongly hinders the act of leaving home for reasons of education and this applies to both males and females.

From the parental education now we move to the educational level of respondents what plays very important role in the process of study. Especially, "being in the process of education" drastically decreases the relative risk of leaving home (by up to 20 times). The level of education matters as far as leaving home is concerned due to continuing education. Finishing high school accelerates this risk: 20 times for females and 40 times for males. The results from Table 3 allow us to state that vocational education in Poland is more efficient for females than for males. Having finished vocational school facilitates starting a job only for females.

In comparison with the previous model[3] the effect of the size of the area of residence up to age 15 confirms preceding results. Young people from towns and small cities have the highest risk of leaving home owing to continuing education. The reason is

[3] See previous subchapter.

simple: they have to move to the larger cities, where the universities are usually located. People living in rural areas have the lowest risk for reasons of partnership and this can be explained by the fact that young couples usually stay in their parental home.

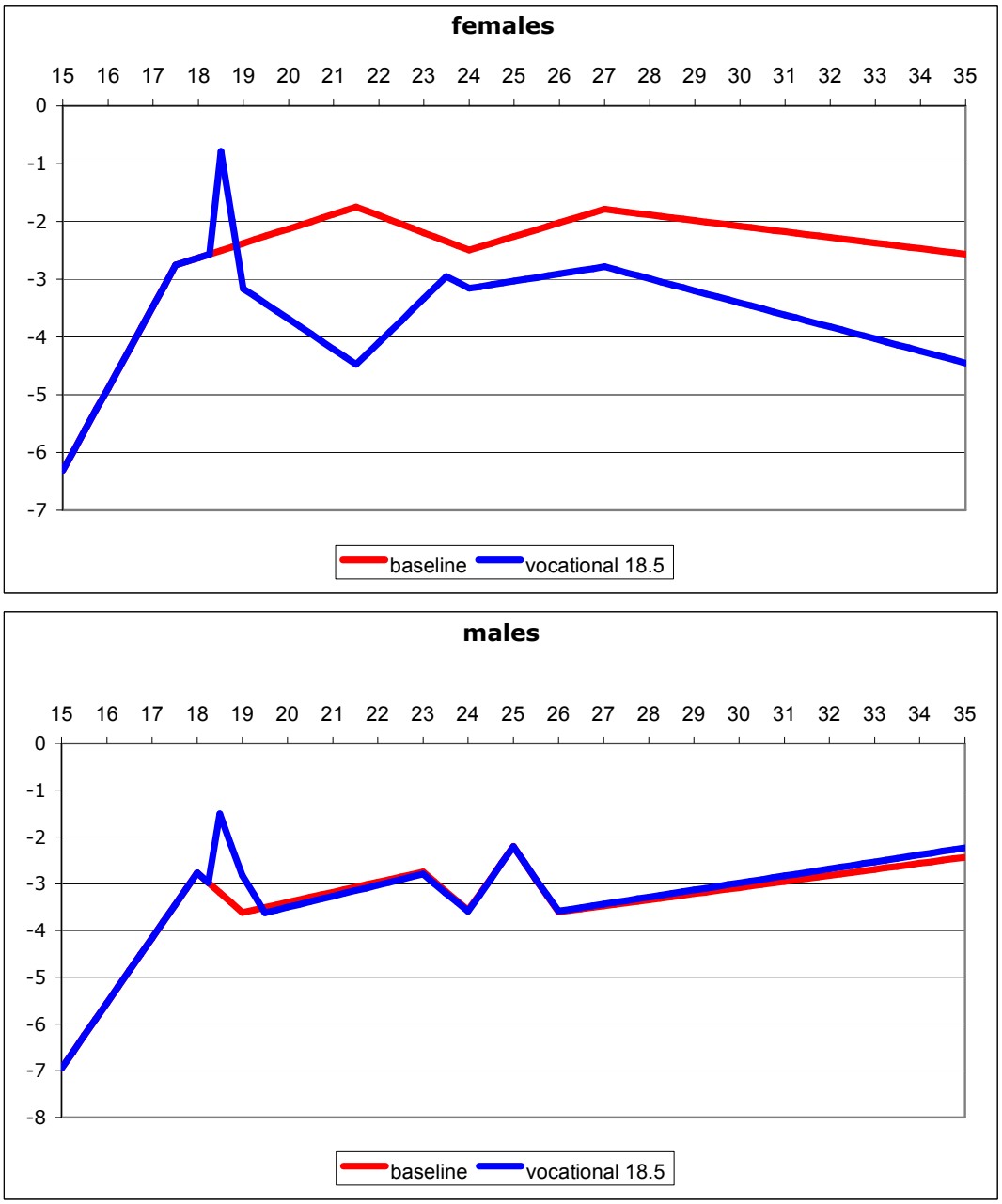
An introduction of unobserved heterogeneity to the model on females hardly changes the result. Although the standard deviation σ is statistically significant, the model without this covariate explains the behavior of the respondents sufficiently.

The effect of finishing education on the risk of leaving home for reasons of employment

In this part of the empirical analysis I will present the influence of finishing vocational school. To capture this effect, I introduced to the models a conditional spline ("kick-in spline"). The spline applies to the model when a respondent has definitively finished his or her education. Taking a hypothetical example, I assume that an individual finishes vocational school at age 18. Figure 11 presents the results.

As can be observed, finishing vocational school has an effect on leaving home for reasons of employment both for females and males. During the first 6 months after education completion, the risk rapidly grows, followed by a phase of decline. For men, the risk reaches the baseline level after 1.5 years, whereas for women it drops to far below the baseline level as early as 1 year since finishing school and it remains under this level at every age. Thus, there is a 6 months period at which young people are exposed to a higher risk of leaving home. If they don't leave within 1 year after education completion, the probability that they do leave drops sharply. This effect is strong especially among young women.

Figure 11. The effect of finishing vocational school



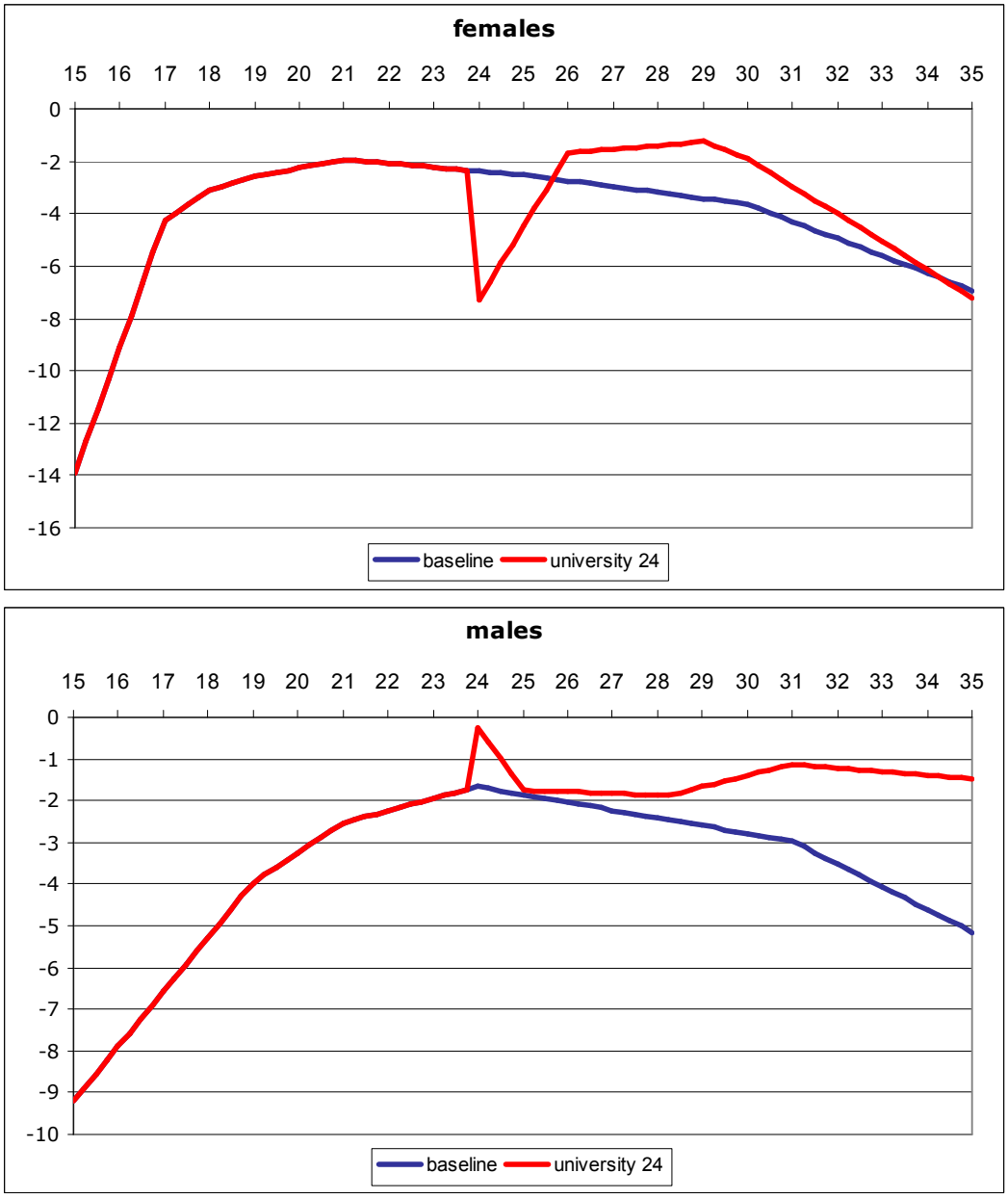
Source: Author's calculations based on Polish 2001 survey data

Effect of the end of education on the risk of leaving home due to marital reasons

This section is devoted to analyze the effect of finishing tertiary education on the leaving home due to marriage. In this hypothetical example I assume that the end of university takes place at the age 24, for both, males and females. The graphical representation is presented on the Figure 12. The most interesting findings concern first 2 years after finishing higher education level. For women the intensity of leaving due to marriage drops substantially and remains below the reference line for two years. The possible explanation of this phenomenon is as follows: after finishing university and before forming family young, high educated women want to gain job experience. Thus in this period they are less likely to live home because of partnership formation reasons than lower educated females. After 2 years period one can observe on the graph the crossover, and the risk of leaving home due to marriage for university educated women is higher than for the others. A very different situation takes place among men. The fact of having completed university studied increase the likelihood of leaving home because of marriage formation. Results presented in this section are coherent with Becker's theory. Applying his economic approach to my results I can explain my findings in following manner: the fact of finishing university increases the opportunity costs of leaving home because of getting marriage immediately after getting diploma. Opposite trend for males may prove the hypotheses that those with university degree have higher chances for success on the marriage market.

Summarizing this paragraph, one can claim that there is a group of women with higher autonomy aspirations that delays leaving home synchronized with union formation in order to be more independent on partner after marriage.

Figure 12. The effect of finishing university.



Source: Author's calculations based on Polish 2001-survey data

Conclusions

In this paper, I have investigated the process of leaving the parental home in Poland. The main analysis has focused on different reasons for leaving home. I have marked out three main causes for leaving home, namely partnership formation, continuing education, and starting a new job. An analysis of the data from the 2001 Polish retrospective survey has shown that the timing of young adults' leaving home responds to a variety of social, economic and demographic factors. A large variance in the age of leaving home implies that in Poland, as in the Southern European countries,

this event depends highly on personal preferences and constraints. In the North European societies, however, young people do not seem to have much space for individual choice (Billari et al. 2000, Reher 1998).

Results from my investigation have confirmed the previous findings on Poland (Kowalska and Wróblewska 2001, Billari et al. 2000) that that the main reason for leaving home is partnership formation. As mentioned earlier in this paper, partnership formation results mainly from marriage, because cohabitation is not widely spread in Poland. Poland can therefore be placed in the one group with Italy and Spain. Although first signs of changes are evident among the youngest cohort (born 1975 and later), it is still too early to claim that we capture the scope of these changes.

The results on Polish confirm previous findings on gender differences as to the process of leaving home (Billari et al. 2000, Mulder et al. 2002). Firstly, there is a time gap between males and females of almost three years. Secondly, women are driven by other forces than men, e.g. the mother's education and occupational status have an impact that is stronger on daughters than on sons. Additionally, looking at the figures in the Table 3, it can be said that young women seem to be influenced by limited parental resources in the family less so males – a higher number of siblings increases the risk of leaving home more so for men than for women. This only applies to employment as a reason of leaving home, however.

Generally, the existence as well as the access to parental resources are the most important factors that young people consider during their decision making process. This large influence of parental resources on the process of leaving home is the effect of the state not offering assistance to young people on that matter. Once again, this places Poland in the one group with Southern European countries, where the "strong family" system dominates (Reher 1998).

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