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Motherhood after the age of 35 in Poland

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Abstract

Postponing motherhood is a widespread phenomenon across developed countries however only few studies look into late motherhood in post-socialist countries, especially on a micro-scale. In this study, I look at the context of the first childbirth in Poland in the midst of the political transformation of 1989. Employing sequence analysis I reconstructed life trajectories of women who experienced the transition to adulthood during the late 1980's and the early 1990's and have just recently completed their fertility histories. Individual data from the 2011 GGS-PL and the 2011 FAMWELL Survey were used. Comparing paths of their lives, I searched for differences in terms of educational, professional and conjugal careers between women who gave birth before the age of 30 and after the age of 35. The results show how various life careers crisscross over the life course leading women to late motherhood.

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1. Introduction: Studies of late motherhood

The aim of this article is to study the phenomenon of very late motherhood in Poland. It is an exploratory study which describes life trajectories of women who postponed motherhood until late ages and verifies whether their life paths are different from those of mothers who gave birth earlier in their lives. To achieve this aim, I compare life paths of "late" mothers, i.e. women who gave birth after turning 35 years old with lives of "standard" mothers - i.e. women who gave birth before turning 30 years old. As previous research proved that partnership, employment and educational histories interact strongly with fertility career, I also focused on women's life developments in these three spheres.

In the heart of this analysis lies the key premise of the life course theory that the decision to become a mother is strongly influenced by past experiences and the current context of women's lives. To incorporate different life spheres into one path, theoretical achievements of the life course theory are supported with a statistical method called sequence analysis. The main idea of this method is to represent one's life as a chain of states creating a life trajectory. This technique is not new in social research (Abbott 1990), but it has not been often used in fertility studies (e.g. Baizán, Michielin, and Billari 2002; Mynarska et al. 2013). Using sequence analysis enables adopting a holistic view on the life course and observing life course developments in parallel, showing not only when crucial events took place but also what were the precedent, concurrent and subsequent circumstances of these changes.

This study sheds light on the process of postponing motherhood to markedly late ages. Fertility postponement is a widespread phenomenon across Western European countries (Kohler, Billari, and Ortega 2002; Sobotka 2004). People who delay the transition into parenthood tend to have lower fertility than those who decide on motherhood early in their lives (Kohler and Ortega 2002; Kohler, Billari, and Ortega 2002). Therefore, motherhood postponement might have a negative impact on the population size. Later births also decrease population growth by lengthening the time until the next generation reaches the childbearing age (Coale and Tye 1961). However numerous studies have been conducted to investigate determinants of motherhood postponement, much less research has been carried out on postponement of fertility to very late ages, i.e. beyond the age 35 or 40 (Benzies et al. 2006; Browning 2008; Soloway et al. 1987). There have been attempts to study very late fertility,

¹ The term "standard" mothers was chosen out of necessity to differentiate "late" mothers from their counterparts who gave birth earlier in their lives. It is a strictly working term - it does not reflect any opinions on what a standard age for childbirth should be.

but researchers mainly focused on medical consequences of delaying childbirth or on the result of mother's age on child's health and well-being (see e.g. review by Boivin et al. 2009; Cooke, Mills, and Lavender 2010). This article supplements previous research by studying what happens before the childbirth - namely how various life course developments crisscross over the life course leading women to late motherhood.

Studying the postponement of motherhood to the very late ages is particularly important in the case of Poland. This country underwent a major change in fertility behaviours after the year 1989 (Kotowska 2009; Matysiak et al. 2014) including a marked postponement of childbearing. We can observe an increase in mean age at first birth (around 4 years over past 40 years, reaching 26.4 in 2011²) and a significant growth of the group of "late" mothers - the proportion of women who had their first child after turning 35 rose from 2.3% in 2002 to 5.6% in 2011 (own computations using National Register of Births, 2012). "Late" mothers constitute a new and rapidly growing category of Polish women, which has not been researched yet.

2. Literature review

Literature on motherhood postponement describes a vast range of factors potentially affecting the decision about the timing of first childbirth. Among them are factors directly affecting conception - such as spread of contraceptive methods and raising awareness about family planning - but also factors that might affect individual preferences in birth timing or influence the realization of these preferences. These include various socio-economic factors such as increased education enrolment among women or growing female labour force participation (Kohler, Billari, and Ortega 2002; Sobotka 2004), limited housing availability (Mulder 2006; Rindfuss and Brauner-Otto 2008) or economic uncertainty (Adsera 2004; Kreyenfeld 2010). The proponents of the Second Demographic Transition theory draw attention to how shifts in values and attitudes may lead to postponement of parenthood (Lesthaeghe 1995; Van de Kaa 1987). In addition, the importance of changing gender roles has been discussed in this respect (McDonald 2006). Several researchers form hypotheses that motherhood postponement might be also related to changes in relationship behaviours (Baizán, Aassve, and Billari 2003; Testa 2007). More and more research sheds light on the relation between family policies and motherhood intentions or childbearing postponement (a broad review is provided e.g. by Balbo, Billari, and Mills 2013; Mills et al. 2011).

² Data from Eurostat, accessed on May 1st, 2013.

Studies of very late motherhood show that three life spheres are crucial for the decision to have a baby. "Late" mothers are usually highly educated and hold better career positions (Berryman and Windridge 1997; Boivin et al. 2009; Robinson et al. 1987). They find it difficult to leave work and they admit that opportunities for future promotions affected the timing of their first pregnancy (Carolan 2007). They mention troubles in finding the "right fellow" - i.e. a stable partner they would want to form a family with (Benzies et al. 2006). Therefore, results from previous research lead to a conclusion that one should explore educational and professional careers, as well as partnership histories to understand late motherhood. In addition, during a series of interviews conducted between 2004 and 2005 among Poles who postponed motherhood (Mynarska 2011), these three life spheres were named as the most important factors taken into account when thinking about childbearing. What is more, the stability regarding work and union is still perceived as an "absolute necessity" for transitioning to parenthood (Mynarska and Styrac 2014). In the next sections, I shortly review the literature on relation between experiences in these three spheres and the decision about the timing of first child birth.

Education

There is a strong correlation between prolonging education by women and postponing childbearing (Kravdal and Rindfuss 2008; Mills et al. 2011; Rindfuss, Bumpass, and St. John 1980; Sobotka 2004). On one hand, researchers focus on the impact of remaining in education on the timing of the first childbirth. One of the arguments might be that since both education and childbearing are time consuming, women who decide to pursue higher education might decide to delay their maternal plans. Some studies in fact show that postponing motherhood during studies can be just a result of the time taken to complete schooling (Hoem 1986; Blossfeld and Huinink 1991; Kravdal 1994).

On the other hand remaining in education for a longer period of time can encourage obtaining interests or lifestyles that compete with parenthood (Kohler, Billari, and Ortega 2002). In addition, being enrolled in education for a longer period of time usually results in obtaining higher level degrees. It has been proven that highly educated women are often driving the trend of having children later in their lives (Kohler, Billari, and Ortega 2002; Sobotka 2004). Higher education is related with further professional career developments because it might enable women to pursue better occupations and focus on their careers (the detailed relation between professional career and motherhood is mentioned in the next section).

Tertiary education enrolment among women in Poland is increasing. In 2012, among women aged 25 or more, 24% had tertiary education while among men - 19.4% (Bukowski 2010). National studies indicate that education enrolment might interfere with fertility plans of Polish women and also that - as in other countries with low fertility levels - women with tertiary education tend to have children later in their lives than women with lower levels of education (Matysiak 2009). Given the changes in the educational careers of Polish women and the influence that the period of education might have on the timing of fertility, in this study, two main aspects of education are taken into consideration - being enrolled in education and the impact of the level of education attained by the mother.

Employment

The relation between employment and the decision about motherhood has been a subject of studies of economists as well as demographers and sociologists. Economic studies which concentrate on the tempo of fertility focus on the dynamics of direct costs and opportunity costs of having children (Cigno 1991; Happel, Hill, and Low 1984; Walker, Pratt, and Eddy 1995). The main conclusion of economic analyses of the birth timing is that the birth of a child impacts the mother's earnings in two ways. Primarily, child birth reduces her labour market participations - a woman has to withdraw from work to take care of the baby³. Secondly, it impacts her career development and "*slows down the growth of her marketable human capital*" (Cigno 1991). These explanations have several implications. One may be that when resources are scarce (and they usually are for young couples who have only started their experience on the labour market), people might delay childbearing until they can afford it. Another implication would be that if woman's age rises with work experience, she faces a conflict between the decision to continue working and earn more or to pause work and give birth. In the latter case she risks delaying the increase of her wages. Many income studies of mothers indeed show that motherhood postponement provides considerable earnings returns, especially for higher educated women or those in professional occupations (Begall and Mills 2013; Miller 2011; Van Bavel 2010). Moreover, economic theories also imply that when women think about childbearing, they consider not only specifically the amount of their wages. They also account for other work-related aspects such as accumulating work experience (Kravdal 1994) or attaining more stable positions in the workplace (Happel, Hill, and Low 1984) In several empirical studies, women mention that conscious career planning

³ Many economic studies take into account also the impact of different forms of childcare. Explanation of interdependencies between purchased child care and fertility can be found in e.g. Ermisch 2003.

was their main motivation for motherhood postponement, as they anticipated that they will have better chances of career advancement if they delay childbirth (thorough review in e.g. Gustafsson 2003).

According to my knowledge, few studies focus on the impact of female employment on fertility postponement in Poland. Kotowska and colleagues (2009) describe the decline in economic stability of women on the labour market in Poland and form a hypothesis that women fear risking their employment prospects and tend to postpone motherhood until they establish a better position on the labour market. Some results of Matysiak and Vignoli (2009) prove this assumption - they found out that Polish women who just entered employment are more likely to delay motherhood to obtain more human capital and secure a stable position. Nonetheless, the impact of female labour force participation on the timing of birth might be twofold. On one hand, conditions for combining childcare and professional occupation are very difficult in Poland (Matysiak 2009), which might discourage women from pursuing motherhood. On the other hand, most households mostly rely on two incomes, therefore having a secure position can be perceived by women as a precondition to become a mother mostly because of these financial reasons (Matysiak 2009; Mynarska 2011).

In this context, it seems important to compare women who gave first birth early and later in their lives in terms of their career developments. In this study, depicting entire paths of professional careers of the mothers allows me to show the dynamics of women's employment, accounting for both the periods of employment and unemployment.

Partnerships

Having a supportive partner is crucial for childbearing decisions (Philipov, Spéder, and Billari 2006; Testa 2007). Many previous studies have shown that women in stable relationships are more likely to have children than single women. A lack of a partner, a lack of emotional and financial support that a stable partner provides strongly impacts women's childbearing choices. Delaying entering a stable union has a direct influence on the timing of the first birth, as shown in the literature (Corijn and Klijzing 2001). Moreover, marriage is considered to be a more stable form of a union than cohabitation (see e.g. Heuveline and Timberlake 2004; Liefbroer and Dourleijn 2006) and the evidence exists that married women have a higher tendency to have a child (Baizán, Aassve, and Billari 2003; Kemkes-Grottenthaler 2003). Poland underwent a rapid change in family formation patterns over the past two decades - Poles enter stable unions later - the mean age at entering marriage rose from 22.4 in 1993 to 25.5 in 2010 for women and from 24.7 to 27.9 for men respectively

(Computations based on Eurostat data, 2013). More and more people choose cohabitation as the form of their first stable relationship nowadays (Matysiak and Mynarska 2010). Nevertheless, marriage is still the prevailing form of family in Poland and the majority of children are born in marriages (Matysiak and Mynarska 2014).

Looking at the histories of union formations enables discovering the circumstances in which "*standard*" and "*late*" mothers enter relationships. It unveils the differences in the life paths between women in terms of the timing of union formations and the stability of unions. In this study, I look for differences in the patterns of lives of mothers in Poland in terms of the timing of entering stable unions, experiencing cohabitation and union dissolution and length of the relationship in which the first child was born.

To sum up, previous research has shown clearly that educational, professional or conjugal career interact with the decision about the timing of birth. In this study, benefiting from a holistic perspective offered by the life course approach, I aim at showing how experiences of these three careers crisscross over the life course. I employ sequence analysis to identify the key differences between lives of "*standard*" mothers and "*late*" mothers in Poland in terms of schooling, employment and partnership histories.

3. Data

In this study I drew information about women's education, union history, and employment from two databases. For "late" mothers, I used a sample from the survey "*The spread of new demographic events: childlessness and late fertility*," which was conducted within the FAMWELL project in 2011⁴. The survey aimed at a better understanding of causes of the new patterns of family formation in Poland and covered women born between 1965 and 1974 who were either "late" mothers (i.e. who gave birth to their first child after turning 35 years old) or who were childless (i.e. who had not given birth to a child until the moment of the interview). Only "late" mothers from the survey were included in this analysis. The FAMWELL Survey was conducted in urban areas only due to the fact that childlessness and late motherhood are much less spread across rural regions and reaching women in villages would be much more time and money intensive. Nonetheless, the survey provides important information about the phenomenon of late motherhood in Poland.

For "standard" mothers, I used information from the Generation and Gender Survey (GGS-PL) conducted in Poland in 2011 by the Institute of Statistics and Demography of Warsaw School of Economics. Data collection was performed by Central Statistical Office⁵. In this survey, 20,000 Polish inhabitants aged 18 to 79 were questioned. I extracted a sample of women born between 1965 and 1974 (the same birth cohorts as for "late" mothers), who gave birth to their first child until the age of 30. The sample was then narrowed to urban population only to match the "late" mothers sample.

Although the surveys were conducted separately, they were based on the same core questionnaire and the questions regarding education, employment and partnerships were the same. After eliminating observations with incomplete trajectories, I obtained a sample of 672 "standard" mothers and 511 "late" mothers.

4. Method: Sequence analysis

To study lives of mothers in Poland, I applied sequence analysis. This is a method of exploring ordered data while focusing on consecutive elements. A *sequence* in this method is an ordered sample of units (e.g. – events, steps in traditional dances, chromosomes in the DNA) (Abbott 1990). Separate elements of sequences are called *states* and the focus is on the

⁴ More information about the project available at <http://kolegia.sgh.waw.pl/pl/KAE/struktura/ISiD/projekty/famwell>

⁵ For detailed description of the GGS-PL Survey, please see (I. E. Kotowska and Józwiak 2011).

trajectories of transitions between the states in the life course of an individual. To create sequences of the states one treats an individual's life as a chain of discrete time units (Billari 1994) and assigns a number or a letter to each time unit. For example, if a person was first single (S) for two years, then cohabiting (C) for consecutive two years, and then was married (M) for two years one could write SSCM to describe this sequence. To build the sequences of the states in lives of Polish women, I merged information about the three dimensions of a subject's life mentioned above, i.e. education, unions' history, and employment into three-dimensional states.

Regarding education, one could be either "in education" or could have "finished education". Unfortunately, the surveys do not provide full histories of education process. Therefore, as a moment marking the end of education, the date of obtaining the highest degree is used. However, a woman could have experienced a break in education; she could have finished secondary education and applied for studies a couple of years later. In this case, she would have obtained a degree later in her life. Unfortunately, I cannot control for this mechanism and I need to treat these women as "being in education" until achieving the highest degree.

Regarding employment, one could be either "working" or "not working". This career was monitored from the moment a woman began her first job until the moment of the survey interview. Periods of not working were all periods when a woman was not employed; it means that during this time she could have been either unemployed or inactive. Notably, episodes of maternity or parental leave are coded as being in employment.

Regarding unions I first introduced three states "single", "cohabiting" and "married" but in preliminary analyses, cohabitation was observed in both samples with similar, relatively low frequencies – 16.5% of "standard" mothers and 19% of "late" mothers have experienced cohabitation before the first childbirth and on average the period of cohabitation lasted less than 1 year for both groups. Consequently, I decided to merge the states of cohabitation and marriage into one state - "married". Information on all previous relationships of the respondents were gathered, although the respondents were asked to report only the unions that involved at least three months of cohabitation.

A detailed set of statuses (i.e. variations of each career) is enclosed below and the detailed table of all the states created from merging the statuses is in the appendix. By merging these three dimensions related to each career, 8 unique states were obtained; each state includes a status related to educational career, a status related to professional career and a status related to union histories. E.g. in a state a woman could be in education, working and

single (and this state would be named EdWrkS), or she could have finished education, be working and be married (this state would be named FinEdWrkM).

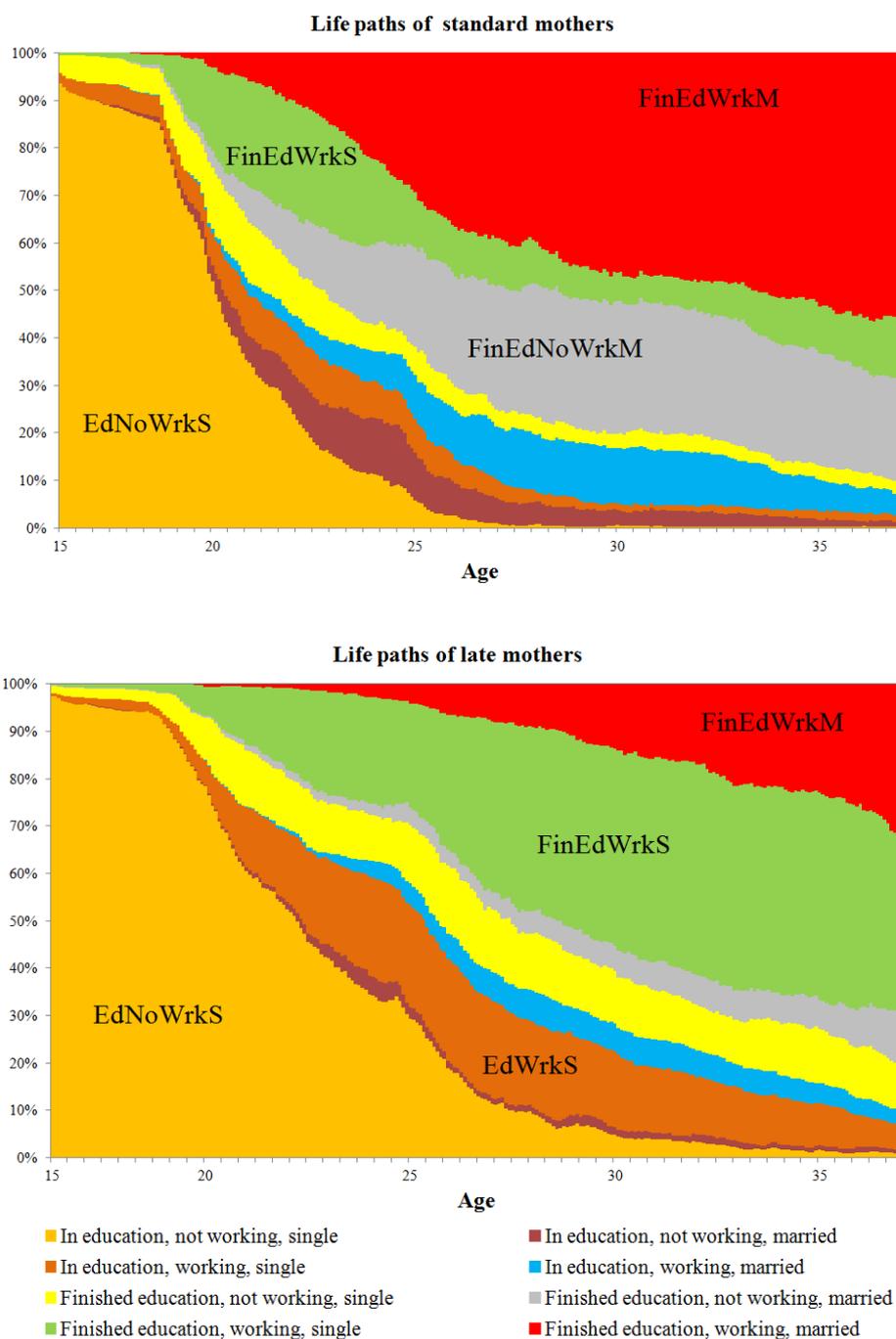
I chose to use the period of 15 to 40 years old for my analyses. This way I obtained 25 years split into 300 months of observation that served as the basic time unit for sequence analysis. Women in the sample were between 35 and 46 years old - for those who were younger than 40, missing months were blanked (in "standard" mothers' sample 38.7%, in "late" mothers' sample 15.5%). I assigned each month a state from the universe described above.

Table 1. Division of statuses in each career analyzed.

| Career | Statuses |
|------------|---|
| Education | In education (Ed) Finished education (FinEd) |
| Employment | Working (Wrk) Not working (NoWrk) |
| Unions | Single (S) Married (M) |

5. Results

I plotted all the sequences of the states in two graphs below, showing the distribution of the states among respondents at each month of the observation. The results visible on the graphs are then supported by several descriptive statistics computed after drawing conclusions from the life paths.



Source: Own calculations in STATA.

The first difference that is visible on the graphs is the difference in the length of the period of schooling. By the age of 20, 52.7% of "standard" mothers have already finished education compared to 26.8% of "late" mothers. On average, "late" mothers spend 3 years more in education than "standard" mothers, however there is also a large group of "late" mothers who stay in education for a markedly longer period of time - 1/4 of the "late" mothers sample finished education after the age of 30. In addition, among "standard" mothers 24.7% of women obtained any level of tertiary education compared to 51.3% among "late" mothers.

Regarding employment I could see that "standard" mothers and "late" mothers spent the same amount of time in employment (about 14 years out of 25 years of observation). Nonetheless, the patterns of entering the labour market and further experiences are different. "Standard" mothers begin working earlier than "late" mothers - at the age of 20, 44.8% of "standard" mothers remains in the states indicating employment - compared to 26.4% of "late" mothers. These frequencies become nearly equal around the age of 25 and then, in fact, higher percentages of women in employment states are observed among "late" mothers - at the age of 30, respectively 69.6% and 78.5% of "standard" and "late" mothers are working. Noticeably, after the age of 35, the percentage of working women among "late" mothers starts to slightly decrease again as they enter motherhood. What is more, "late" mothers work on average 17 years before the first childbirth compared to 3 years on average in the case of "standard" mothers. Moreover, a clearly visible share of the graph of the life sequences of "standard" mothers is covered by the grey color which corresponds to the state "finished education, not working, married". Let me call this state "being a housewife". At the age of 25, 20.9% of "standard" mothers are housewives but very few "late" mothers (3.3%). In fact, throughout the entire period of their adult lives, there are more housewives among "standard" than among "late" mothers, even after the age of 35 which is when "late" mothers start bearing children.

The biggest differences among "standard" and "late" mothers can be observed in regards to partnership histories. "Late" mothers enter stable unions considerably later - from the age of 25, the graph showing lives of "standard" mothers is clearly dominated by the states indicating being married but these states are barely visible in the graph of "late" mothers. By the age of 25, only 16.8% of "late" mothers are in unions and already 80.5% of "standard" mothers are in unions. Forming a union later in life results in spending less time in a union over the entire period of observation - "standard" mothers spend on average 15.5 years out of 25 years of observation in unions and "late" mothers - 6.3 years.

Noteworthy, the average time span between entering the union with the father of the first child and the birth of this child was 1.28 years among "standard" mothers and 4.93 years among "late" mothers. While among "standard" mothers, 75% of the first births fall within the first 3 years of the union, a markedly lower share of the first births among "late" mothers falls into this time-interval - 41.5%. Additionally, 16% of "late" mothers gave birth for the first time only after the 10th marriage anniversary (0.1% of "standard" mothers respectively). Furthermore, the frequencies of experiencing union dissolution before the first child were relatively rare in both samples - although notably higher for "late" mothers (5.4% of "standard" mothers and 17.8% of "late" mothers).

Table 2. Distribution of states among women at given ages.

Percentage of women who finished education at the age of:

| | 15 | 20 | 25 | 30 | 35 | 40 |
|--------------------|-----|------|------|------|------|------|
| "Late" mothers | 1.9 | 26.8 | 55.4 | 75.2 | 87.7 | 97.3 |
| "Standard" mothers | 4.3 | 52.7 | 79.9 | 85.6 | 91.7 | 96.2 |

Percentage of women working at the age of:

| | 15 | 20 | 25 | 30 | 35 | 40 |
|--------------------|-----|------|------|------|------|------|
| "Late" mothers | 0.8 | 26.4 | 64.8 | 78.5 | 77.3 | 74.8 |
| "Standard" mothers | 2.5 | 44.8 | 67.6 | 69.6 | 75.7 | 76.4 |

Percentage of married women at the age of:

| | 15 | 20 | 25 | 30 | 35 | 40 |
|--------------------|-----|------|------|------|------|------|
| "Late" mothers | 0.2 | 3.3 | 16.8 | 29.6 | 40.9 | 72.5 |
| "Standard" mothers | 0.0 | 27.8 | 80.5 | 89.7 | 83.8 | 76.6 |

Percentage of "housewives" at the age of:

| | 15 | 20 | 25 | 30 | 35 | 40 |
|--------------------|-----|-----|------|------|------|------|
| "Late" mothers | 0.2 | 1.6 | 3.3 | 6.3 | 9.2 | 16.9 |
| "Standard" mothers | 0.0 | 8.3 | 20.9 | 24.3 | 19.9 | 19.1 |

Source: Own calculations in STATA.

Table 3. Additional variables for descriptive analysis.

| Additional variables | Values (standard errors): | |
|--|---------------------------|-----------------|
| | "Standard" mothers | "Late" mothers |
| Percentage of women who obtained any level of tertiary education | 24.7% (0.02) | 51.3% (0.02) |
| Percentage of women who experienced cohabitation before first childbirth | 16.5% (0.02) | 19.2% (0.02) |
| Percentage of women who experienced union dissolution before first childbirth | 5.4% (0.01) | 17.8% (0.02) |
| Mean period of time between forming a union with the father of the first child and the first childbirth (in years) | 1.3 (0.09) | 4.9 (0.26) |
| Mean period of time spent in employment before the first childbirth (in years) | 2.9 (0.11) | 12.9 (0.11) |

Source: Own calculations in STATA.

Summary & Conclusions

The main aim of this study was to compare the life paths of women who became mothers after the age of 35 with lives of "standard" mothers who gave birth before reaching the age of 30. The results indicate that, in fact, there are differences between "late" mothers and "standard" mothers in regards to educational and professional careers as well as in the process of union formation. By using the technique of sequence analysis, I was able to unveil the complexities of the life paths of mothers in Poland and to show not only general differences but also the differences in the dynamics of respective processes between both groups of mothers.

First of all, "late" mothers spend more time in education – they remain in education on average almost 3 years longer. Continuing education, therefore, might have contributed to the postponement of the first childbirth, which would be in accordance with previous research (Blossfeld and Huinink 1991; Hoem 1986). Nevertheless, the lack of full schooling histories impedes clear interpretation of the role of educational career in this study and future research should provide more detailed information on educational histories to fully understand the impact of the process of schooling on fertility in Poland. Furthermore, using sequence analysis provided me with a more in-depth description of the paths of education of "late" mothers. Some of them finished education early, but some stayed in education up until the age of 30 (¼ of the "late" mothers sample). This is a sign of the diversification of life paths

among "late" mothers. This diversification was more closely analyzed in my master thesis, where distinct groups of women with high and low levels of education were characterized (Rybińska 2013).

Secondly, "late" mothers and "standard" mothers, overall, spend a similar amount of time working which might mean that - in line with previous results (e.g. Matysiak 2009) - employment is an important part of life of all mothers in Poland. In addition to previous research, this study also depicts the differences in the dynamics of mothers' employment careers. Although the general time spent in employment does not vary between "late" and "standard" mothers, the periods of more intense labour market involvement are different. "Standard" mothers start working before "late" mothers do which is due to the longer period of education experienced by the latter. However, before the childbirth, they work for a shorter period of time than "late" mothers (on average 2.9 years compared to on average 12.9 years for "late" mothers). These results clearly indicate that the postponement of childbearing to very late ages is not only related with a prolonged education and a later entry to the labour market but also with a markedly longer employment spell before a child is born.

Additionally, I have also observed a different pattern of the labour market exit after the first childbirth. I noticed a marked discrepancy in the frequency of the state that can be described as "being a housewife" (i.e. the state "finished education, not working, married"). The percentage of women in this state among "late" mothers remains lower than for "standard" mothers through the entire period of their adult lives, even after "late" mothers have their first children. It seems that among the "late" sample fewer mothers drop out from the labour market after the childbirth⁶. This could mean that in fact a marked motherhood postponement - through various mechanisms - makes it easier for women to stay on the labour market after the childbirth. It might thus have a positive impact on a woman's employment career.

What remains unknown is why "late" mothers stay on the labour market after the child is born? It might reflect their individual preferences - if they value employment more they would be more willing to continue working. On the other hand, having worked more before the childbirth, they can be more settled-in in their careers or have reached more stable positions and because of this stability they might find it easier to combine work and childcare. Maybe they have also better positions in bargaining flexible time schedules? Maybe they earn

⁶ One might hypothesise that some of the "late" mothers are still on maternity or parental leaves and might drop out of the labour market after the leave ends. However, at the end of the period of observation, only 7.6% of "late" mothers were still benefiting from such work leaves.

more and can afford full time childcare arrangements for their newborn? Surveys that control for various circumstances of the exit from the labour market after having children could shed more light on the possible answers to why "late" mothers are more attached to the labour market after the childbirth.

Thirdly, the most visible differences appeared in the comparison of the union histories. First, as there were only few, and short, instances of entering cohabitation before marriage, I cannot form any conclusion on the impact of cohabitation on the timing of the first childbirth. But altogether, "late" mothers spend considerably less time in unions and it usually stems from the fact that they enter stable unions markedly later, usually after turning 30 years old. This might support results from previous research (Corijn and Klijzing 2001) - delaying forming a stable union might have had an impact on the delay of motherhood in case of Polish women. Union formation postponement may have been a manifestation of individual preferences of these women - they might have wanted to focus more on their education and professional career but they could have also encountered difficulties in finding a suitable partner they would have liked to form a family with. Moreover, "late" mothers experienced union dissolutions more often than "standard" mothers and such disruption of union stability could have had a negative impact on the timing of fertility.

What is more, the visualization of the life paths of mothers using sequence analysis also enabled us to see the complexity of the union formation processes among these two groups. Although "standard" mothers had their first children soon after forming a stable union, the link between union formation and first childbirth is more complex in the case of "late" mothers. Some of them entered relationships late and had children shortly after forming stable unions but some experienced the transition to motherhood markedly later - even 10 years after forming the union. It is possible that the former wanted to form a family earlier but could not find a suitable partner. Or other life circumstances such as economic hardship or a disease of another family member hindered both the union and family formation. How about "late" mothers who postponed the transition into motherhood being married for 10 years or more? Maybe they have been forced to postpone childbirth due to general health issues or more specifically - fecundity constraints? Due to high refusal rates and incomplete histories of using medical assistance in infertility treatments in both surveys, I was not able to control for these problems. This variety of patterns discovered by using sequence analysis calls for more attention as it shows again the diversity of the life paths of "late" mothers.

To summarize, in this study - using sequence analysis I was able to discover the differences in the paths of lives of "standard" and "late" mothers in Poland and to show

complex relations between the timing of fertility and three crucial careers - educational, professional and conjugal providing an important insight into the dynamics of lives of women in Poland. This exploratory technique provided me not only with a general picture of motherhood postponement, but also gave me the possibility to look closer into the developments of the life courses of Polish mothers showing the richness of their life experiences. This study did not, however, cover several significant aspects of women's lives. Since the FAMWELL survey was a retrospective study and only the first wave of the GGS-PL Survey was used, I was only able to trace histories back. Therefore some issues might have eluded - such as history of partner's education and work or relationship quality. Thus further research should encompass more longitudinal information. Including complete educational histories, questions about the periods and the context of unemployment and inactivity or full information on reproductive health would enable broader analysis of "late" mother's lives. These are very ambitious future goals that would require both more qualitative and quantitative research and I hope that these results provided an inspirational introduction and possible future directions for studying late motherhood in Poland.

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Appendix

Table 4. Full list of all states created during sequence construction.

| State description | Abbreviation |
|--|--------------|
| In education, not working, single | EdNoWrkS |
| In education, not working, married | EdNoWrkM |
| In education, working, single | EdWrkS |
| In education, working, married | EdWrkM |
| Finished education, not working, single | FinEdNoWrkS |
| Finished education, not working, married | FinEdNoWrkM |
| Finished education, working, single | FinEdWrkS |
| Finished education, working, married | FinEdWrkM |

Source: Own calculations.