

Our dear children: gender division of market and household work in the low-fertility environment in Poland

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Abstract

The gender division of market and household work remains unequal across the world. This is related in particular to childcare responsibilities. Therefore, reconciliation of work and family lives and broader engagement of women on the labour market is a challenge. The “incomplete revolution” of responsibilities at the household level result in a persistent gender gap in employment, particularly in the case of women with below higher educational attainment.

We analyse the developments of labour market inactivity of women aged 25-49 years due to childcare responsibilities after 2003, including the age, period and cohort effects vis a vis the women’s engagement in the time of work at home.

Our analysis shows that since 2004 there is a stall and reverse of the gender revolution in Poland, resulting in reduced labour income, increase time of unpaid work and labour market inactivity of women. The latter is particularly visible after 2015, since the introduction of the conservative government.

Key words: gender systems, gender equity, national transfer accounts, time use survey, national time transfer accounts, household economy

JEL codes: H31, H13, J18, J22, P46

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Introduction

The relationships between women's education, fertility, labour market and household activity are constantly changing, as a part of the ongoing transformation of gender roles. Trends towards less children and postponed parenthood are driven by economic and social forces that require further understanding.

The studies of gender roles are motivated by various theoretical approaches, including the intra-household bargaining model (Becker 1990a, 1990b, 1991, Hersch and Stratton, 1994, Stancanelli and Stratton 2014), the collective model (Browning and Chiappori 1998) in economics or resource theory that is applied by sociologists (Blood and Wolfe 1960, Shelton and John, 1993, Gupta and Ash 2008, Baxter and Hewitt 2013).

The literature in recent years also focuses on the role of the gender systems in explaining fertility patterns (McDonald 2000, Watkins 1993, Presser 1997). The gender equality inherent in social institutions, income transfer systems, services, educational systems and industrial relations (i.e. McDonald 2000) is an important factor that explains the patterns of fertility and family formation. Many of those institutions may support the male-breadwinner model and lead to reduced fertility. Literature findings also suggest that fertility tends to be higher in countries that have more family-friendly working conditions (i.e. Mills 2010). These include the provision of childcare, availability of part-time work, flexibility of hours, equal access to maternity and paternity leave and more open conditions for absence (Rindfuss & Brauner-Otto 2008). They lead to more equal division of childcare time between men and women as well as shift of some of the childcare time towards the market, through the provision of (particularly) early childhood education and care. This forms a gender system that can be understood as “a set of beliefs and norms, common practices, and associated sanctions through which the meaning of male and female and the rights and obligations of males and females of different ages and social statuses are defined. Gender systems typically compass both a division of labour and stratification of the genders” (Oppenheim Mason, 2001: 161).

Empirical evidence shows that fertility trends tend to decline when women enter the labour market, but begin to increase when societies move to more gender equity (McDonald 2000, Esping-Andersen 2009, Esping-Andersen & Billari 2015, Goldscheider et al 2015). The remaining gender inequality in both market and non-market activities may be one of the factors that affects the low fertility levels, and in particular gender equality at the household level becomes an important driver of family change and fertility. The evidence from the time use surveys shows that women's role and the division of household labour within the family remains larger, despite some progress observed between 1960s and 1990s, but since then the convergence slowed down in the countries, where inequality is smaller, but still persistent (Altintas & Sullivan, 2016). At the same time, analyses of the household and market work show that the housework time has limited sensitivity to labour market events (Foster & Stratton, 2017; Hook, 2010). Given the challenges that emerge with demographic and societal developments, the researchers also refer to the development of new theoretical frameworks about family change and gender revolution (Esping-Andersen & Billari, 2015, Saraceno & Keck, 2011), or the ‘incomplete’ gender revolution, referring to the lack of gender equity with regards to the division of the household roles.

More insight into interlinkages between gender systems and fertility is needed, as the fertility decline below replacement is a core development of the second demographic transition (Van de Kaa, 1987). This decline is attributed to changes in family related behaviours which are

manifested in postponement of partnership and parenthood, deinstitutionalisation of the family and less stable unions. In the Central and Eastern Europe, including Poland, the period after 1990 has seen a rapid acceleration of all the characteristic trends of family related behaviours under the second demographic transition: first births and first marriages were postponed, fertility has fallen, percentage of non-marital births has surged, cohabitation has increased while marriage rates have plummeted, and divorce rates increased (Sobotka, 2008).

In the article, we aim to analyse the evolution of the outcomes of gender system in Poland reflected in the differences between labour income of men and women, the work at home and labour market inactivity of women due to childcare obligations in Poland after the EU accession in 2004. Our hypothesis is that despite the observed economic development, the rise of the educational attainment, and influence of the policies promoting gender equality in the European Union, the gender system in Poland remains to a large extent traditional. This refers both to the labour market and household dimensions, particularly in the case of women, who do not have tertiary education.

To verify our hypothesis, we investigate the division between household and labour market activity for women in childbearing age (25-49 years) in Poland since 2004. In this period there were significant changes in social and economic conditions. These include the EU accession that stimulated higher economic growth, followed by the relatively mild economic slowdown after the Great Crisis and the further improvements on the labour market, which is seen both in the increase of employment rate and decline of the unemployment, which is one of the lowest in the EU. Simultaneously, the educational attainment of the young people in Poland rose and the share of young people with tertiary education increased from below to above the EU average. These developments were accompanied by the evolution of the family policy in Poland, including the increased access to childcare facilities, extension of the maternity and parental leaves as well as introduction of a universal child benefit. All these changes had an impact on the childbearing decisions and gender roles.

The article is organised as follows. We begin with the presentation of the main developments related to fertility developments, labour market situation, changes in educational attainment and access to early childhood education and care since 2004, that provide the necessary background for our analyses. Then, we present the methodological approach, including the main assumptions of the National Transfer Accounts and National Time Transfer Accounts and their application in the context of gender differences and the assumption of the Age-Period-Cohort models. Next, we present our empirical analysis of the changes in gender differences in labour income, household work and the inactivity of women related to the childcare obligations. In conclusions, we focus on the progress of the gender revolution in Poland in time and in the generational context.

1. The evolution of gender systems and gender roles in Poland – is there a progress?

Since the economic transition in the 1990s, the fertility rate in Poland remains very low. Despite remarkable social and economic development, combined with changes in family policy, which are described for example by (Szelewa, 2016), the number of births and the fertility rate in Poland did not change significantly, as indicated in Figure 1. The temporary increases in fertility rates around 2008 and 2017 correspond to the new measures in family policies, namely extension of the maternity and parental leaves and introduction of a universal child benefit,

respectively. However, after the transitory increases, fertility rates seem to return to lower levels.

[Figure 1 around here]

The low fertility can be partially explained by changing structure of educational attainment. Van Bavel et al. (2018) show that women with high educational attainment have lower cohort fertility, compared to those with medium or low educational attainment. As explained by (Kotowska, Józwiak, Matysiak, & Baranowska, 2008), prolonged education contributes to postponement of marriage and parenthood. The trends in the educational attainment show a remarkable increase in the share of people with higher education among younger cohorts between 2004 and 2013. Furthermore, the share of women with higher education is above the one of men. Interestingly, between 2013 and 2019, the share of young people (below 30 years old) with tertiary education declined (Figure 2). The younger cohorts seem to be less interested in obtaining tertiary education (Magda & Strzelecki 2020). The reduced interest in higher education may result from declining wage premium observed in recent years in Poland (Magda, Gromadzki, & Moriconi, 2020).

[Figure 2 around here]

Due to differences in educational activities, women and younger generations benefit more from advancement in education, including among others, higher involvement on the labour market. Women with tertiary education have much higher employment rates compared to women with lower educational attainment. However, the gender gap is persistent in employment rates, which is visible not only for all education levels, but also for people with tertiary education (Figure 3). In the age group 25-44 years, the gender gap for people at all educational levels remains above 12 p.p. and reached 14.1 p.p. in 2019, while in the case of people with tertiary education since 2012 it is around or above 7 p.p. (7.8 p.p. in 2019). This shows that on the labour market there is a gap in the engagement of men and women in a childbearing age in market activities.

[Figure 3 around here]

Significant share of the existing gender gap can be explained by the inactivity of women due to the care for children or adults with disabilities. While less than 0.5% of men in age group 25-44 years is inactive due to this reason, in the case of women since 2017 this share exceeds 10%. Moreover, in recent years the inactivity of women due to this reason is rising, which corresponds to the timing of the introduction of the universal cash childcare benefit, the so-called “Family 500+” (Figure 4). Estimates of (Magda, Kielczewska, & Brandt, 2018) suggest that that by mid-2017 the labour force participation rate of mothers dropped by 2.4 pp as a result of the 500+ benefit. The effect was higher among women with lower levels of education.

[Figure 4 around here]

It should be noted that the rise in the share of women inactive due to the caring responsibilities happens despite the rising share of children attending the early childhood education and care (ECEC) or pre-school institutions. In 2019, 12.4% children aged 0-2 were covered by the ECEC care, compared to 2.0% in 2004 and 4.8% in 2013 (Figure 5a). At the same time, there are significant geographical differences, as 18.4% of children in urban areas and only 3.7% of children in rural areas attend ECEC. In the case of older children (3-5 years old), the extension of pre-school education, including the gradually ensured right to such education to all children

in age group 3-5 years leads to a much higher coverage. In 2019, 88.5% children in this age group attended pre-schools, compared to 74.1% in 2013 and 38.2% in 2004 (Figure 5b).

[Figure 5 about here]

Access to pre-school education is also promoted by the reduction of cost of the pre-school education (parents pay only PLN 1/EUR 0.80 per hour of care) as well as co-financing of the ECEC costs from the government programme (the so-called “Toddler+” introduced from 2001) or local government budgets. As a result, there is a visible reduction of financial barriers related to the childcare, particularly related to the cost of the childcare. Since 2008, the existence of various types barriers related to the access to the childcare (cost, distance, quality of care) is monitored in the Labour Force Survey. Figure 6 shows the share of women in age group 25-44 years experiencing these barriers by educational attainment. In general, women with low and medium education indicate higher barriers compared to those with tertiary education, especially in the case of the cost of childcare, but also distance to the childcare institutions. Introduction of the policies supporting access to childcare, described above, also led to the reduction of the barriers in access to childcare, particularly related to the cost, but also distance to childcare institutions. This is visible especially in the case of women who have below tertiary education.

[Figure 6 about here]

The observed trends related to fertility, changes in educational attainment, employment and inactivity as well as access to childcare in Poland between 2004 and 2019 lead to the following research question: why despite rising human capital of women, and reduced barriers in access to childcare there is a widening gap in the labour market participation between men and women and inactivity related to care obligations? One of the potential explanations is that the existing gender system in Poland still favours the “traditional” model with unequal division of responsibilities, and women contributing more time to childcare work at home (Bjørnholt, Stefansen, Węzyk, & Merecz-Kot, 2017; Duch-Krzyszczek & Titkow, 2006; Feminoteka, 2012; Kurowska, 2020; Strzelecki, Saczuk, Grabowska, & Kotowska, 2015; Szelewa, 2016).

In order to address this question, we investigate changes in the labour market income, non-market (household work) by age, sex and educational attainment as well as inactivity due to the caring responsibilities, to provide a deeper insight into understanding the stalled or even reversing incomplete gender revolution in Poland.

2. Methodology: Application of National Transfer Accounts, National Time Transfer Accounts and Age-Period-Cohort models in understanding the gender division of market and non-market work.

There are two dimensions in gender systems that need to be considered. The first one is the socially constructed roles and expectation for men and women, often related to the division of household labour. The second dimension is the gender equity, which is reflected by the institutionalized measures of (in)equality between men and women at the macro or societal levels, including the labour market. These dimensions are interlinked, as the household division of labour affects the equality of men and women in more institutionalised context. As mentioned in the introduction, the gender division of responsibilities leads to numerous outcomes including:

- Differences in the labour market participation and labour income between men and women;

- Differences in the production of household work between men and women;
- Labour market inactivity of women caused by childcare responsibilities.

In order to quantify the evolution of the gender system in Poland, we measure its outcomes by differences labour market income, gender division of household care and female inactivity due to the childcare obligations. Our analyses are made for people with tertiary and below tertiary educational attainment, as the higher education leads to different behaviours, both on the labour market as well as in the household (Van Bavel et al., 2018).

The first two outcomes can be quantified using the national transfer accounts (NTA) methodology. The NTA approach was developed by Lee and Mason (i.e. Lee & Mason, 2011), who proposed a method to disaggregate national accounts by age and explored how different generations acquire and use economic resources. The basic assumption of the NTA is based on the notion of consumption smoothing in the life course. Individuals consume various public and private goods during their entire life span, while they obtain labour income only during the period when they perform economic activity. The initial approach was supplemented by the addition of production, consumption and transfers of non-market economic activity using the National Time Transfer Accounts (Donehower 2014). The age dimension, added by the NTA and NTTA method, allows comparing intergenerational resource reallocation patterns of national and household economies (Oosthuizen 2018, Vargha et al. 2017, Zanella et al. 2018). Both NTA and NTTA accounts can be also estimated by sex, which in turn provides an insight to the gender system at the country level, taking into account both market and household perspectives. Vargha et al (2017) underline three major benefits of the NTA approach: (1) focusing on the individual instead of institutions; (2) covering the full set of transfers in the generational economy, including the private transfers and (3) considering each generation in the reallocation system at the same time. The important extension of the NTA is the measurement of the sex specific production and consumption patterns and reallocation between sexes (i.e. Hammer, Prskawetz & Freund, 2015; Renteria et al. 2016).

International comparisons of the NTA profiles estimated for the year 2010 show that in Poland the normalised age profile of labour income of women and men in the age group 25-49² are similar to the European average (estimated for 25 countries), with two differences: men in ages 25-40 have slightly higher normalised labour income, compared to the average, and both men and women in ages 45 or higher have lower normalised labour income. This means, that the average labour income gender gap is slightly higher, compared to the European average (Istenič et al., 2016). The gender gap in the labour income profile captures both gender gap in labour market participation (including also higher share of women working part-time) and in wages.

In the case of household production, the NTTA profiles estimated for the harmonised time use surveys for 14 European countries around 2000 (Vargha et al, 2017) show that per-capita childcare time provided by women is highest in Poland among all analysed countries. Moreover, also grandparents and fathers spend relatively more time caring for children, compared to other countries. This is combined with the highest per-capita time consumption of children, particularly in the youngest ages.

We apply the national transfer accounts (NTA) and national time transfer accounts (NTTA) methodology to quantify the gender gap in labour market earnings between 2004 and 2016 and

² That is the average cohort labour income is normalized to the average labour income in the age group 30-49 years.

household production between 2004 and 2013 based on the time use survey data in Poland, respectively. The novelty in our approach is also the application of educational attainment, dividing the population between those with tertiary and below tertiary education, as one of the characteristics. We use the NTA and NTTA profiles for Poland.

The NTA profiles are estimated for years 2004, 2008, 2012 and 2016, including differences by sex and educational attainment in the labour income. The estimates are based on the EU-SILC survey data, for the respective years for which the age profiles were calculated. In the analysis we use the labour income profiles, that include both income from employment and self-employment, following the NTA manual (Mason et al., 2009). In order to compare the labour income in time, we normalise the results to the average labour income of people in age group 30-49 years, which is applied in the NTA approach.

The NTTA profiles were elaborated both for the 2003/2004 and 2013 Time Use Surveys waves. The Time Use Survey (TUS) is a fundamental source of information about time spent on household work. We base our analysis on the TUS from 2003/2004 and 2013 which are a comprehensive compilation of time budgets of people and households in Poland, based on the representative sample of households. The surveys indicate, among others, the main and secondary activities, including household work, but also the consumption of this work by age. Households realise the dual role in the economy. They are both producers and consumers of time. Defining the strict line between those roles is inappropriate to understand the household's functionality. Hence, the dimension of production and consumption should be analysed jointly (Becker 1990a and 1990b).

We also analyse the labour market inactivity of women due to childcare obligations in age group 25-49 years, including the age, period and cohort effects on the inactivity rate between 2004 and 2019 using the Labour Force Survey. There are different factors that affect the inactivity rate in time. It depends on age – the care necessity emerges in the part of the life course when children are small, time – the economic cycle, labour market situation, but also availability of different instruments of family policy change in time as well as cohort – different generations may have different attitudes and approaches regarding staying at home and caring for children. The analysis of the abovementioned factors is possible when using the age-period-cohort decomposition, which was initially proposed by Deaton (1997). It allows to specify the effects related to the age of the observed population, their year of birth and each of the years in the period covered by the observation. It requires a longer time series, therefore it covers a period of 15 years, from 2004 to 2019. For each year, we assessed the share of women who are inactive due to care obligations and then, we performed an analysis (O'Dea 2012) to assess, to which extent the observed changes in inactivity rate depend on the age, year of birth and in time.

3. The evolution of the gender division of market and non-market activities in Poland between 2004 and 2019

3.1. Market production

Differences in the labour income are the most visible symptom of the existing gender gap in the market production. They include both differences related to wages as well as the differences in the time of work. Using the NTA age profiles, we can analyse the differences of the labour income between men and women at different stages of the life course and if they change in time

for each period with the age profiles estimated. We compare the differences using normalised profiles, which allows comparing the evolution of the gender differences between different periods.

As shown in Figure 7, for women in the age group 25-44, we see that the relative labour income declined between 2004 and 2016. In the same period (with exception of men aged 32-35 years old), the relative labour income of men increased. This means that the gender gap in the labour income between 2004 and 2016 widened.

[Figure 7 about here]

The presented evidence shows that the inequality in the market production increased for men and women in the typical age with childcare obligations.

3.2. Non-market production

We used the results of the Polish TUS in 2004 and 2013 to make an empirical estimation of the paid and unpaid work by sex and educational attainment, in order to assess the gender gap in the non-market production. The assessment of the unpaid work is based on more than 50 detailed activities categorised within five groups of household activities, such as household upkeep, food preparation, making and caring for textiles, care: childcare and help to adult family members and help for other households.

The age profiles of the National Time Transfer Accounts in 2004 and 2013 were estimated using a linear regression method. This method ensures the determination of a curve adjusted to the time of production for two groups of activities, including non-market home production (*unpaid work*) and market work (*paid work*). Figure 8 presents the time spend on both types of work by educational attainment and sex estimated for the two consecutive waves of the TUS.

[Figure 8 about here]

Differences in the paid work by gender are largest for people in ages 25-29, which corresponds to the fertility pattern by age and the structure of births – the average age of the first birth for women was 26.7 years in 2013. Educational attainment affects female involvement in paid and unpaid work. Women with tertiary education are more involved in paid work, compared to those who have lower educational attainment. However, the time that they devote to the unpaid work is on average higher than the one devoted to paid work, contrary to men, who spend more time on the paid work. Women with below tertiary education spend three times more doing unpaid work than paid work. There are also differences in the age with the peak time spent on unpaid work. Women with tertiary education note the highest intensity of unpaid work at higher age compared to women with below tertiary education, which is explained by the higher age of childbearing. The traditional division of household responsibilities in the case of people with below tertiary education is also reflected in the time spent on paid work by men, whose time devoted to this activity is higher compared to men with tertiary education. Furthermore, men with tertiary education in early 30s spend more time on unpaid work, compared to those with below higher education. This indicates that the gender division of responsibilities is less unequal among parents with tertiary education.

Between 2004 and 2013 there are some changes in the pattern of unpaid work. Women in both analysed populations below age 30 spent more time on unpaid work in 2013, compared to 2004. Among men, on the contrary, there is some reduction in the time spent on the unpaid work.

Children up to 6 years old are the most important consumers of the unpaid work and home production, which is illustrated in Figure 9. They do not generate household production, but they receive a lot of nursing, education, and other support from the older family members in their household or from the outside. The time spend on childcare responsibilities is linked to the age of children and not the number of children in the household. The increased per capita time spent on the unpaid work between 2004 and 2013 is also reflected in the increased time consumption of youngest children. This explains why, despite the similar number of children in youngest ages in the two analysed periods, the time spent on unpaid work increased.

[Figure 9 about here]

Summing up, the distribution of paid and unpaid work indicates a traditional family model persists in Poland. This means that despite changes in society, in terms of social roles, professional activity of women, women are still responsible for majority of household duties, and men are the “breadwinners”. Additionally, when we add the time spend on both paid and unpaid work, we also see that women spend on work around 5-6 hours a week more compared to men. Such double-burden is persistent, as it was observed in both TUS in 2004 and 2013. Reduction of these inequalities require further focus on improving access to childcare, particularly for youngest children, which despite a visible progress, remains very low. At the same time, there is a need to promote more equal division of time spent on the unpaid work in households. Those with tertiary education, who are more exposed to international practices, are more progressive, which confirms qualitative findings presented by (Bjørnholt et al., 2017).

3.3. Inactivity due to the care responsibilities

The third symptom of the gender inequality is the inactivity of women that can be attributed to the responsibilities related to the care for children or adults with disabilities. As presented in Figure 10, women with below tertiary education more frequently remain inactive due to this reason, compared to women with tertiary education. The peak ages of inactivity are around 29 years and 32 years, respectively (Figure 10). This is explained by the higher childbearing age of women with tertiary education.

[Figure 10 about here]

Figure 10 also shows the evolution of inactivity rates by cohorts. It indicates that in recent period, the inactivity of women born between 1984 and 1991 increased.

The age-period-cohort analysis confirm that the peak of the women’s’ inactivity attributed to the caring obligations occurs around age 29 for women with below tertiary education and around 32-33 years for women with tertiary education. Interestingly, age effects are longer

lasting for women with tertiary educational attainment. Namely, if they withdraw from the labour market, they remain in this status for a longer time.

The cohort coefficients for women with below tertiary education show that the inactivity rises among younger cohorts, particularly those born between 1980 and 1990 and the coefficients are largest for the cohort effects. In the case of women with tertiary education, the direction of changes is similar, but the coefficients are smaller. Finally, the effects are yet not observed for women born after 1990, but these cohorts are still below the peak age of childbearing.

Last but not least, the period coefficients show that between 2005 and 2015 the inactivity rates of women in both populations were more or less stable. Since 2015, that is after the change of the government to the conservative “Law and Justice” party, the inactivity coefficients started to increase. This confirms that the change of the family policies, including the large increase of cash benefits, and the preference towards the “traditional” family model, promoted by the politicians from the ruling party led to the increase of the women’s inactivity in Poland.

6. Conclusions

The evidence presented in the article shows the rising gender inequality both with regards to paid and unpaid work in Poland. Between 2004 and 2013 women in age group reduced the time of their paid work. The value of the market work of women in the age group 25-44 measured by the labour income, also declined between 2004 and 2016. This is the symptom of reversal of gender revolution, understood as more equal labour market situation of men and women.

Furthermore, women are becoming more involved in the unpaid work. Their time spent on the unpaid work increased between 2004 and 2013, both in the case of women with below tertiary and tertiary education. This change happened despite the development of new technologies made many of the home unpaid activities shorter, easier and faster. Some of the routine daily home activities were shortened, but the non-routine ones such as childcare or help for an adult family member are becoming more demanding than in previous decades. This is particularly visible in the increase of the time consumption of youngest children between 2004 and 2013. It should be noted that these changes are observed before the government change in 2015. Children are largest consumers of the unpaid work time are children aged 0 to 6, particularly those below age 3, who have limited access to early childhood education and care. The younger and more educated generations establish their families and have children when they achieve success or the satisfying level of career and earnings. However, once their families expand, they return to the traditional division of responsibilities between man and women. This means that the time devoted to the unpaid household work remains high, and the gender division of household work remains unbalanced. By the same token, the potential of women to involve in the paid work.

The results of the next time use survey should reveal if this trend continues. An indication of the further reversal of the gender revolution is seen in the women’s inactivity rates resulting from caring obligations. The younger cohorts are more frequently inactive, and the share of inactive women also increased after 2015.

Our analysis shows the petrification of the gender system with the unequal division of roles of men and women both on the labour market and in the households. Diversity of transactions carried out inside households, including gender division of paid and unpaid work are affected by the government policies, but also social norms, which can change. The use of the NTA,

NTTA and the APC decomposition provide an important methodological advancement in the multidimensional analysis of operationalisation, measurement and assessment of the gender system at the macroeconomic level as well as within households. Following this approach, we can identify numerous and complex dependencies and relations taking place in households, between men and women and between generations, as well as their evolution in time with generations.

As underlined by Gauthier et al (2018), gender, along with ageing, constitute the main dimensions of demographic studies of family changes. More attention is paid to gender (in)equality in paid jobs, but also in household production. Studies at the employment participation of women are also extended by looking at family employment patterns and family models. There is also an increased attention to look at the work-family reconciliation for both parents. It is important to trace the causes and consequences of gender differences throughout the life course and in multiple domains, including market and non-market activities.

We argue that this process of ‘gender revolution’ and revision of the gender contract needs to be also seen in the context of intergenerational contract. As the example of Poland shows, policies that support less equal division of household labour as well as lack access to quality early childhood education and care, leads to the reversal in gender equality. Therefore, we confirm the hypothesis that the existing gender system in Poland favours the “traditional” model with unequal division of responsibilities, and women contributing more time to childcare work at home. The reversed gender revolution in Poland can have long-term consequences that will be affecting societies not only today, but also in the future.

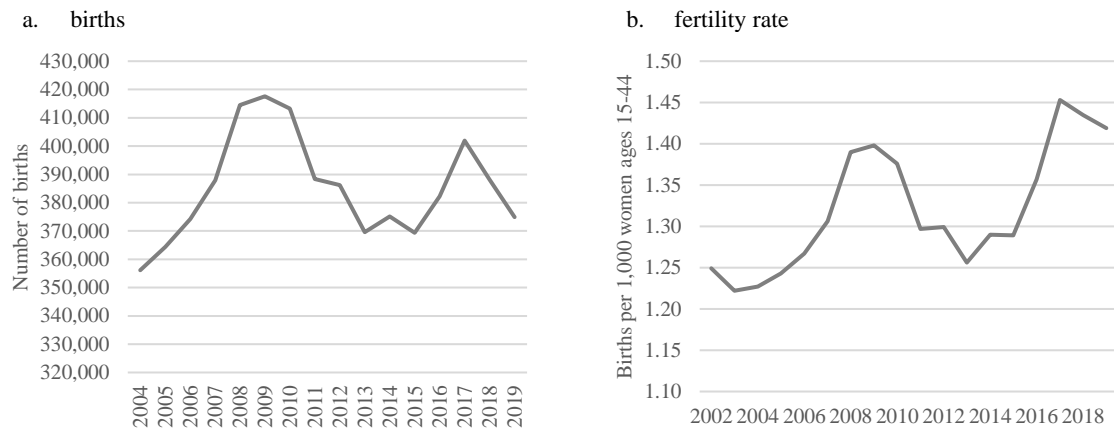
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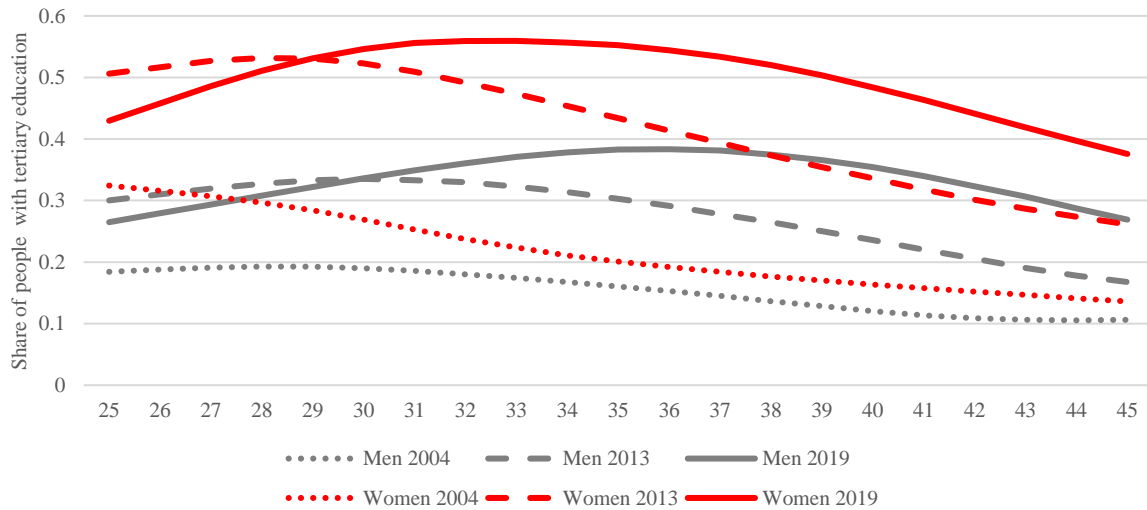
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Figure 1. Number of births and fertility rate in Poland, 2004-2019



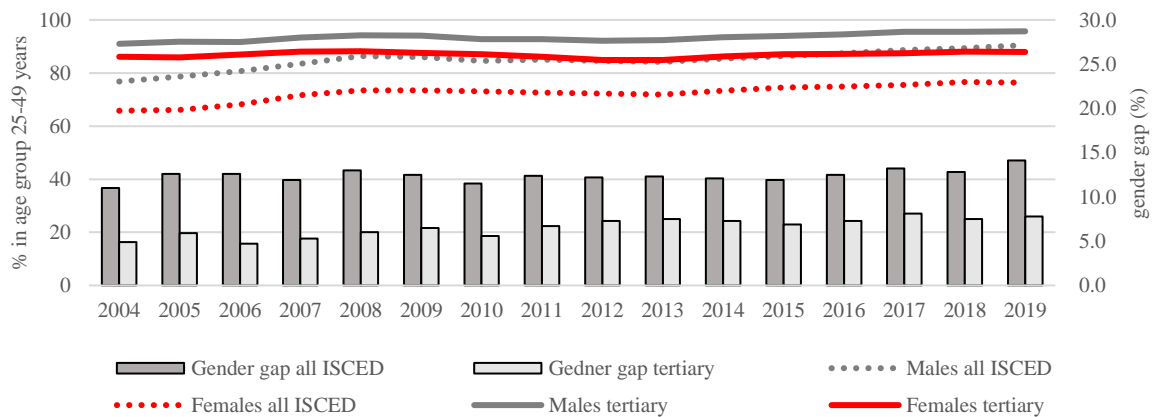
Source: Statistics Poland, Local Data Bank, extracted on March 15, 2021.

Figure 2. Share of men and women with tertiary education in age group 25-44 years, 2004-2019



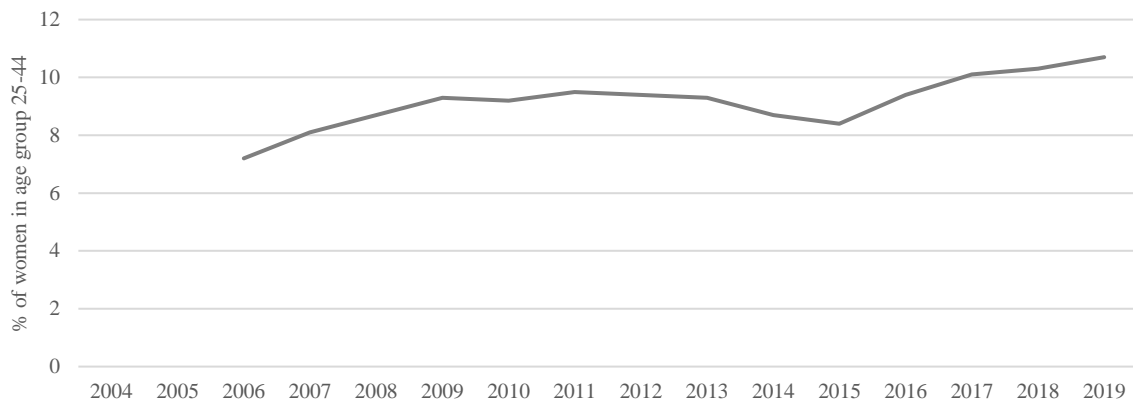
Source: Own analysis based on the Polish Labour Force Survey data

Figure 3. Employment rate of men and women in age group 25-44 years and gender gap by educational attainment, 2004-2019



Source: Eurostat Labour Force Survey, extracted on March 15, 2021.

Figure 4. Share of women not seeking employment due to care of children or adults with disabilities, 2004-2019



Source: Eurostat Labour Force Survey, extracted on March 15, 2021.

Figure 5. Participation of children in Early Childhood Education and Care and pre-school education in Poland, 2004-2019

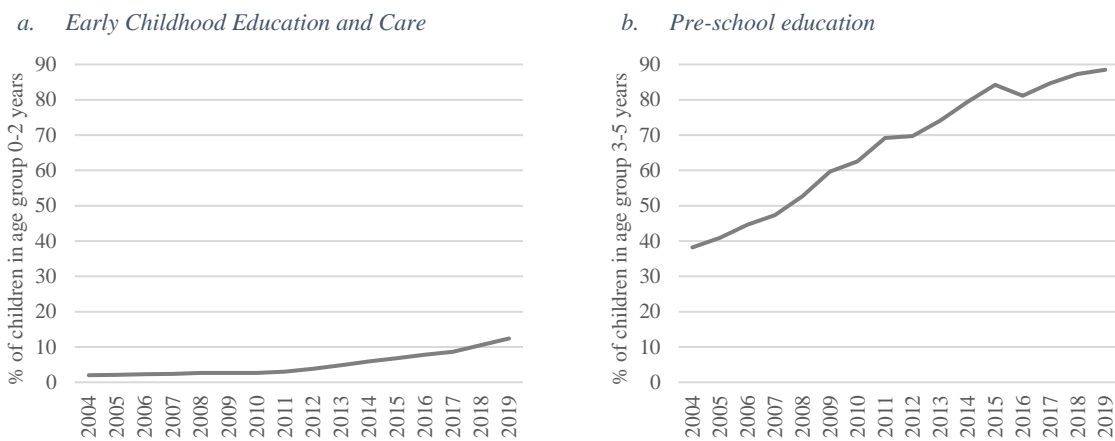
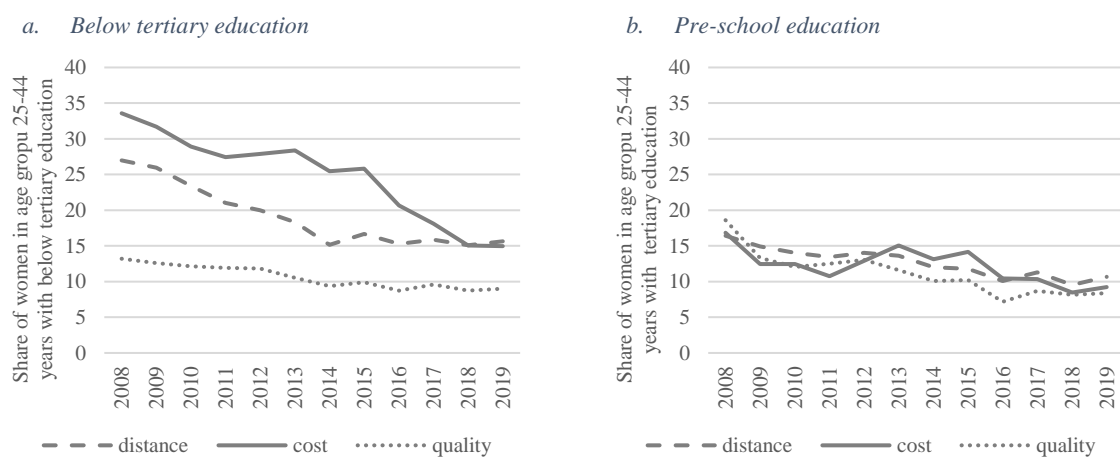
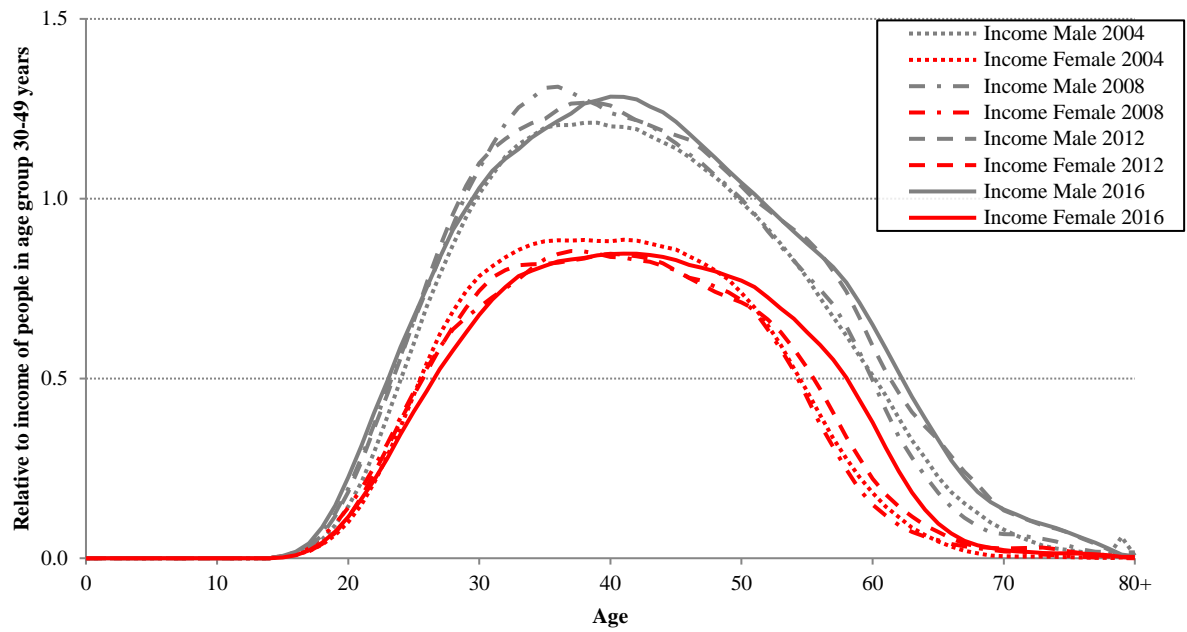


Figure 6. Share of women in age group 25-44 years experiencing barriers in access to childcare by educational attainment, 2008-2019



Source: Own analysis based on the Polish Labour Force Survey data

Figure 7. Age profile of labour income by sex, 2004-2016



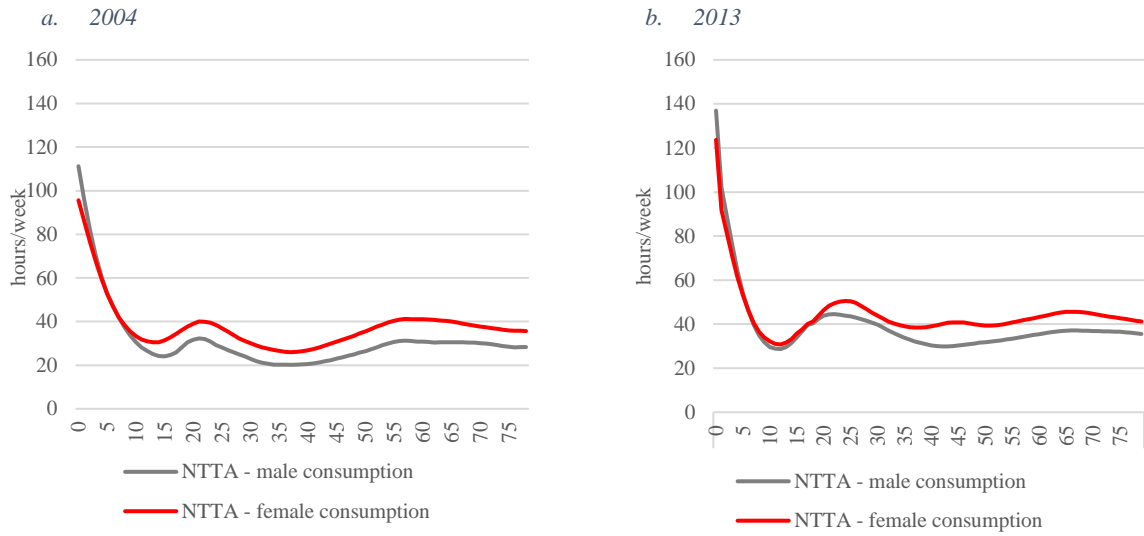
Source: Estimates of the Polish NTA team in the POLNTA project

Figure 8. Age profile of time spend on paid and unpaid work by sex and educational attainment, Poland 2004 and 2013



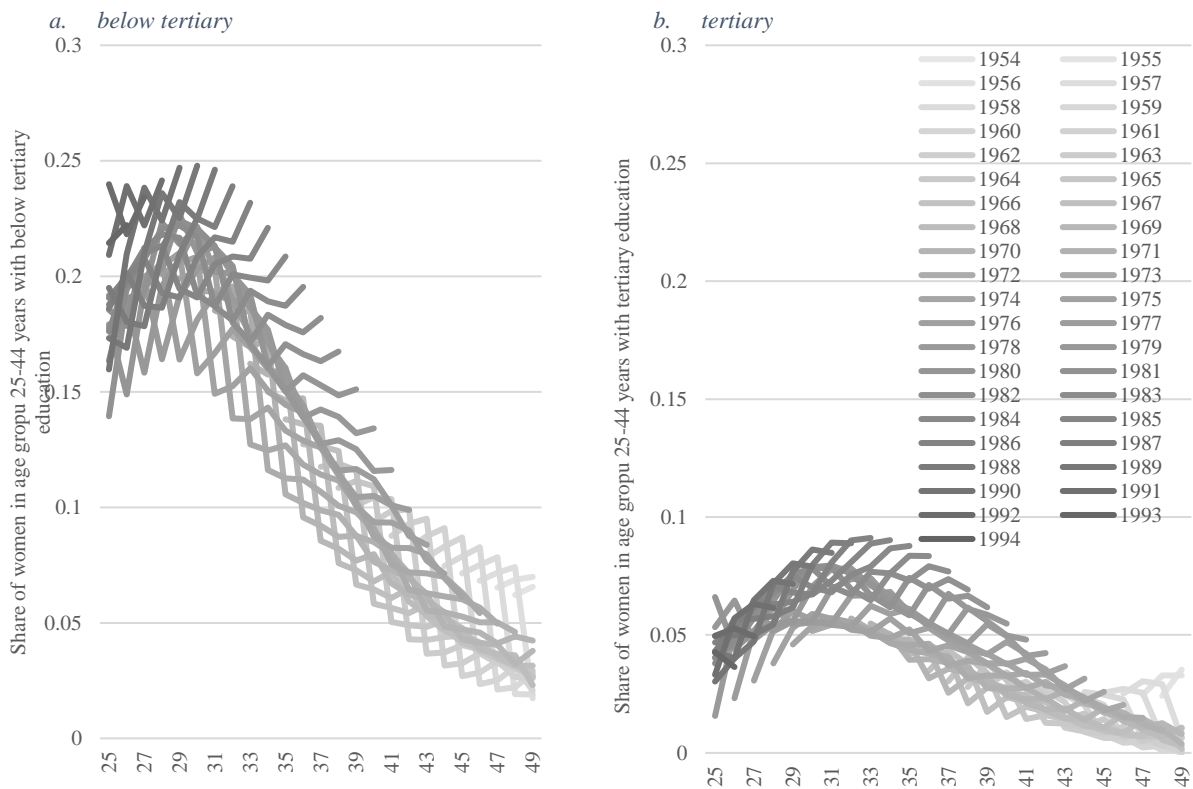
Source: Estimates of the Polish NTA team in the POLNTA project

Figure 9. Age profile of time consumption at households by sex, Poland 2004 and 2013



Source: Estimates of the Polish NTA team in the POLNTA project

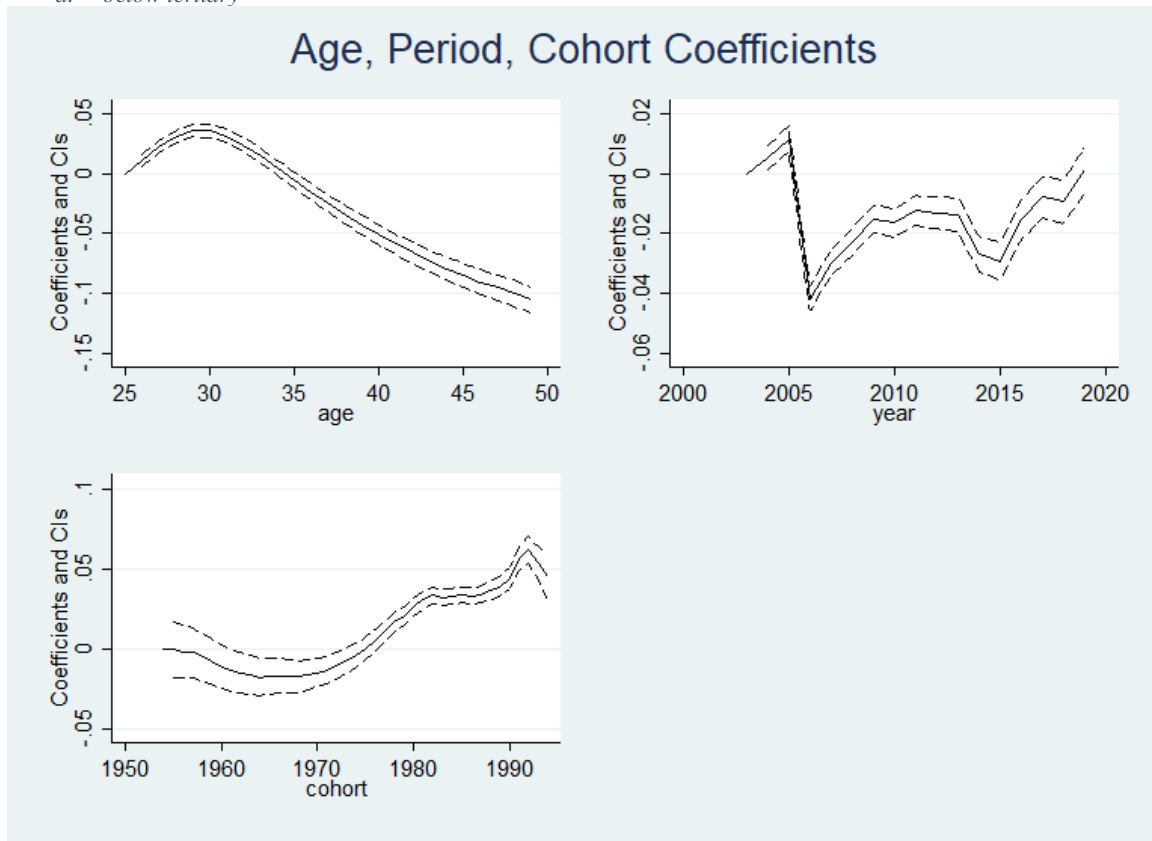
Figure 10. Age specific inactivity rates of women born between 1954 and 1994 by educational attainment, Poland



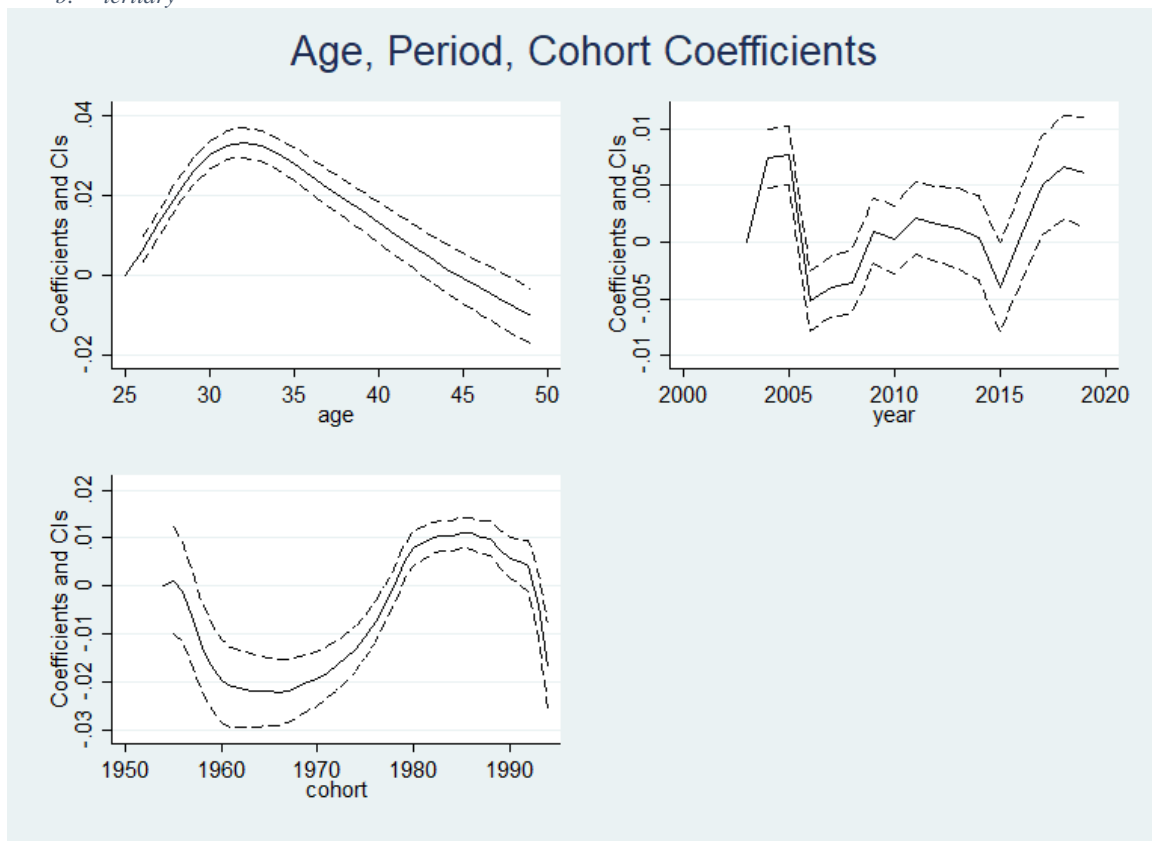
Source: Own analysis based on the Polish Labour Force Survey data, 2004-2019

Figure 11. Age period-cohort coefficients of inactivity rates of women by educational attainment

a. below tertiary



b. tertiary



Note: dotted lines indicate confidence intervals.

Source: Own analysis based on the Polish Labour Force Survey data, 2004-2019