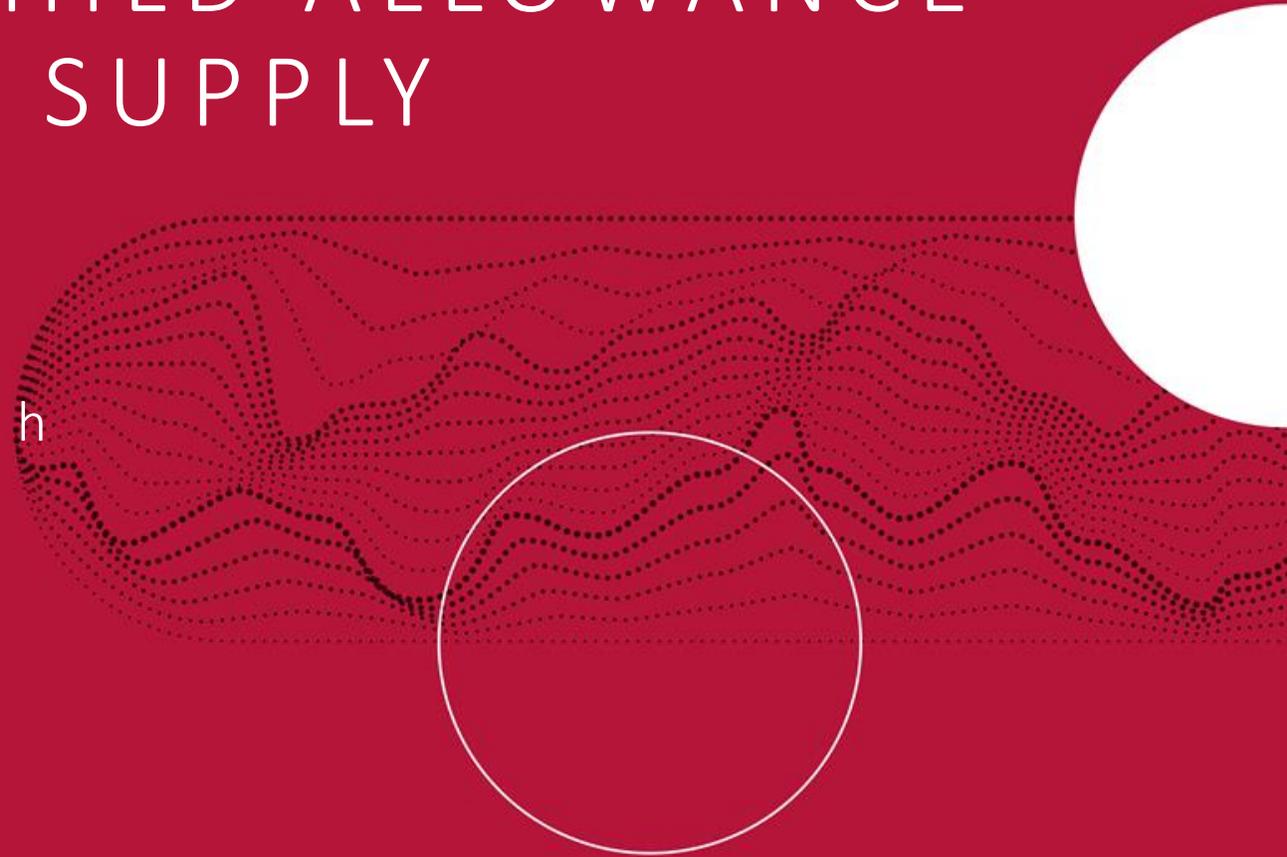


THE “FAMILY 500+” CHILD ALLOWANCE AND FEMALE LABOUR SUPPLY IN POLAND

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Introduction of the “Family 500+” programme in Poland, 2016



- Unconditional cash transfer (500 PLN monthly) for each 2nd and subsequent child
- Means tested for 1st child (fully withdrawn once family income rises above ceiling)
- It doesn't influence the eligibility to other family benefits
- Aim of the programme – to increase fertility, reduce child poverty

Research question



- Expected side effect: significant increase in out-of-work income
-> reduces incentives to labour force participation (income effect)
- Did the introduction of the “Family 500+” programme have a negative impact on female labour supply?
- Evidence so far mostly from countries with higher average incomes
What is the impact in a different institutional context?

A very big change in terms of cash benefits for families



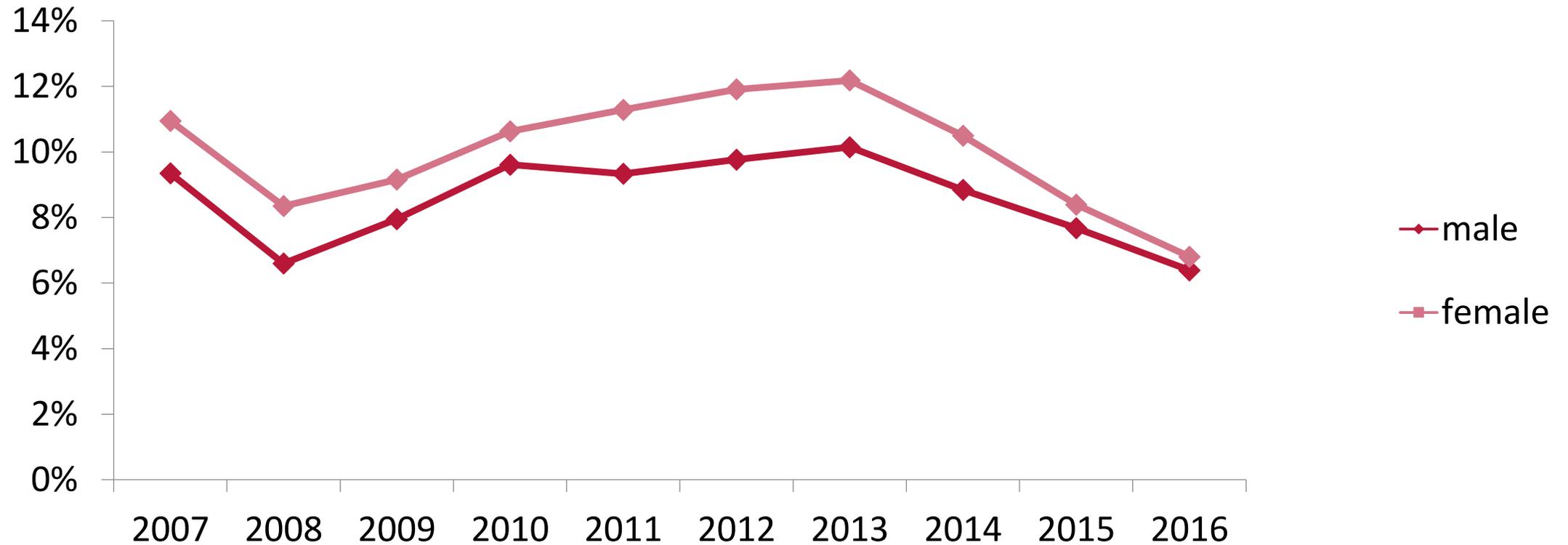
- Big in the amount
 - > worth 1/3 of minimum wage (12% in Germany)

- Much wider coverage
 - > 2.7 million families (before 1.0 million)

Decrease in unemployment rate (since 2013)



Unemployment rate, age 20-49, Poland

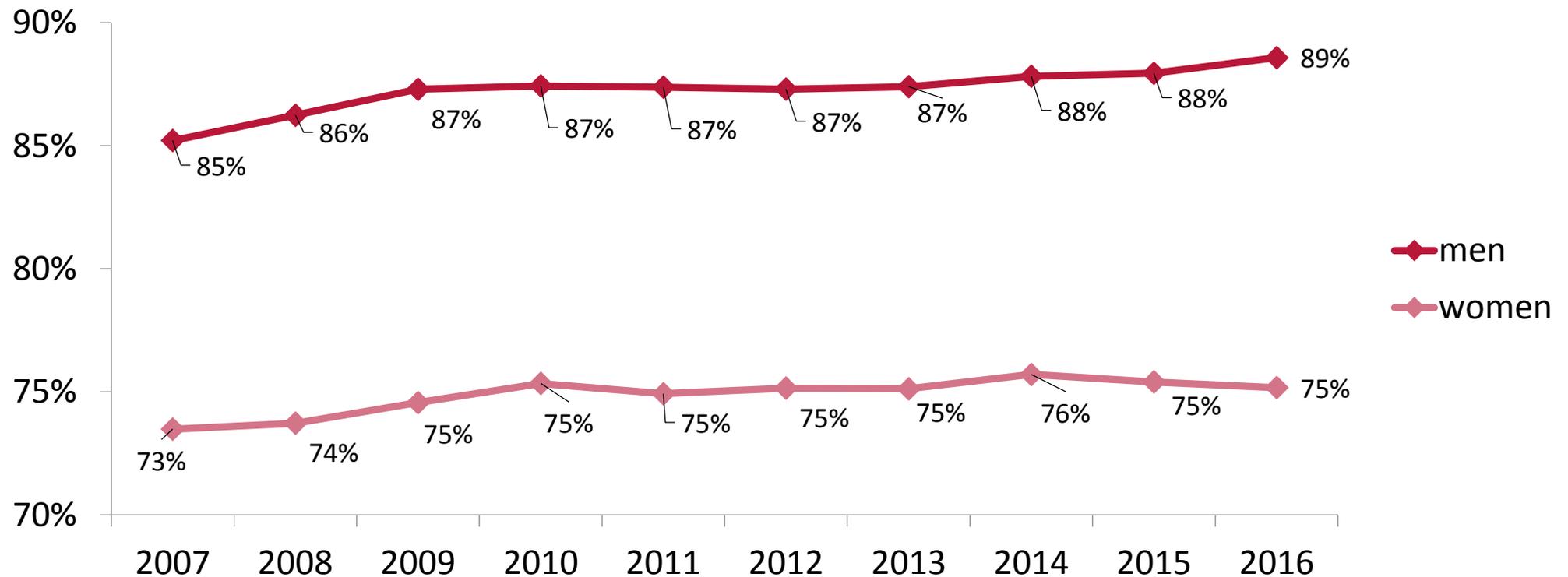


Source: Own calculations based on Polish Labour Force Survey data.

Men's participation rates slightly increasing since 2013, stable among women



Labour force participation rates, age 20-49

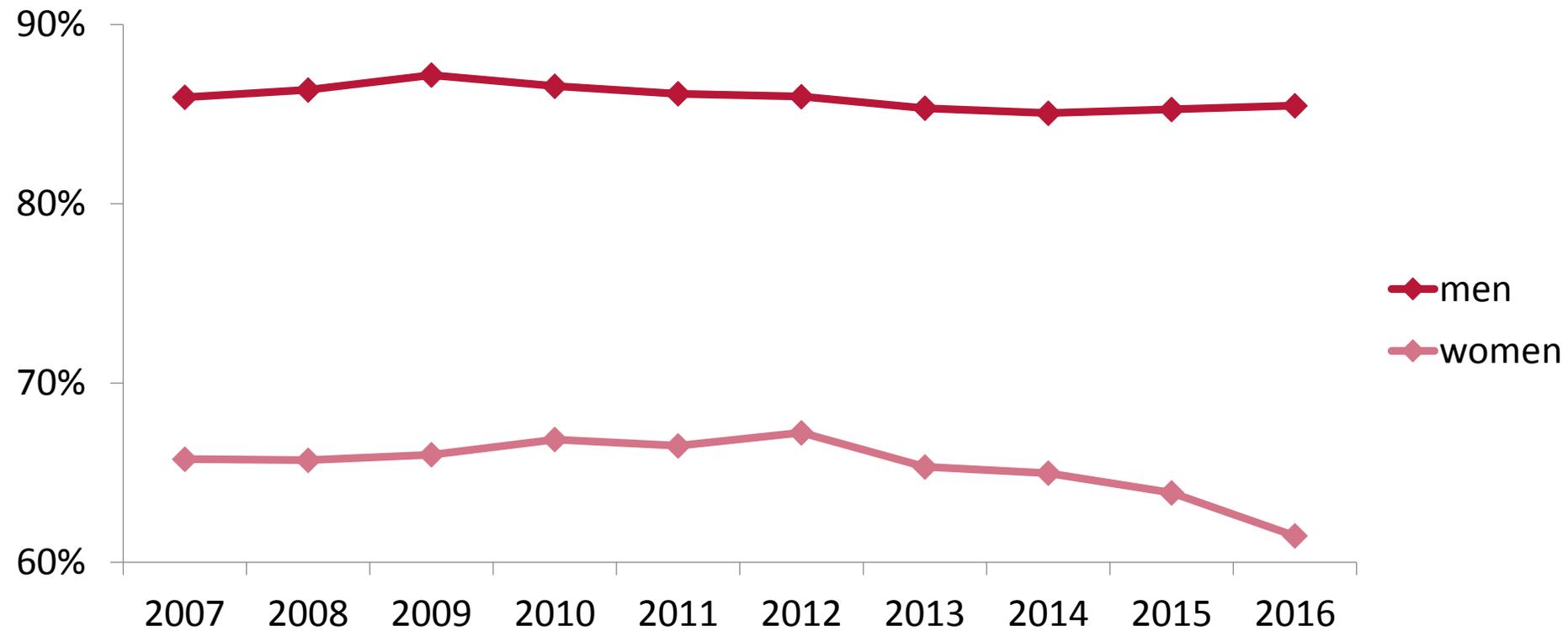


Source: Own calculations based on Polish Labour Force Survey data.

Decline in LFPR among low educated women



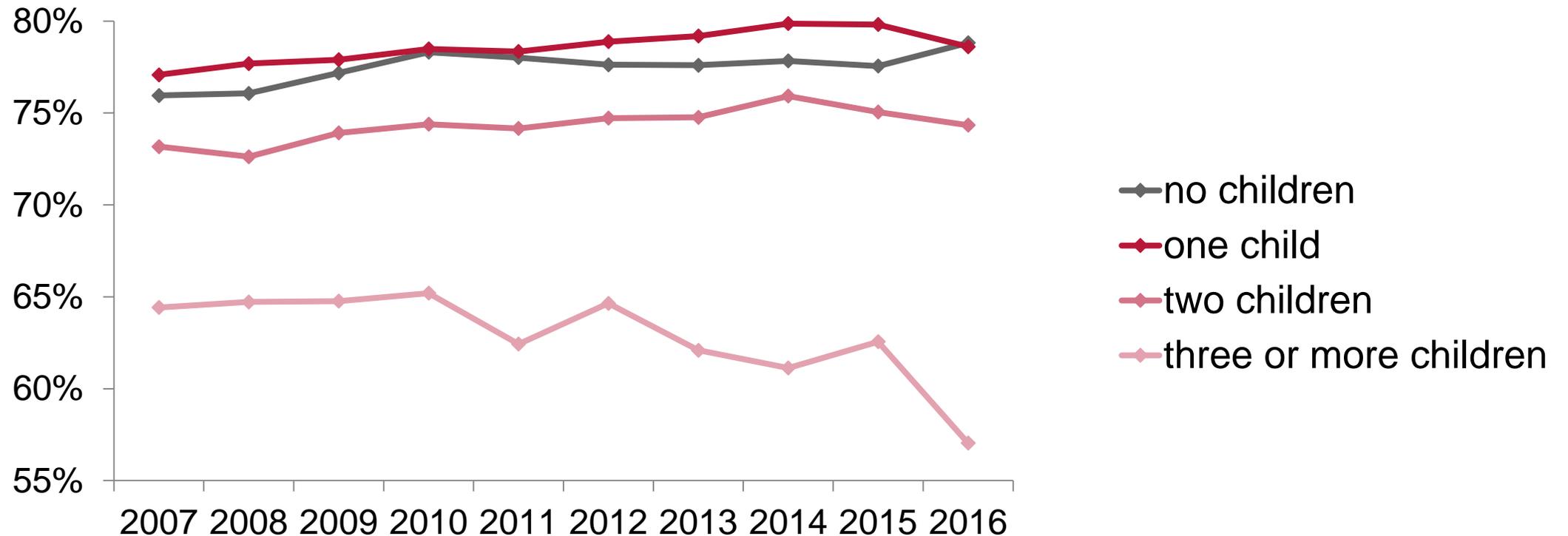
Labour force participation rates
for low educated (basic vocational and lower) men and women, age 20-49



2016 decrease in LFPR among women with children



Labour force participation rates of women (age 20-49) by number of children



Note: Number of children aged less than 18 and living in the same household.

Source: Own calculations based on Polish Labour Force Survey data.

Disentangling the effect of Family 500+ programme



Difference-in-differences approach

- Treatment: eligibility to the 500+ allowance (as of mid 2016)
- We study **changes** in labour force participation rates for treated and control group
 - Verification whether the same prior to the treatment
 - If difference after treatment -> can be attributed to the 500+ effect

Treatment specifications



Main specification

- Treated group: women with one or two children
- Control group: childless women

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- Treated group: women with one or two children
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Alternative specifications

- A) Treated group: only women with two children
- B) Dividing the group of mothers with one child into treated and control group

Data & methodology



- Polish Labour Force Survey, 2010-2016 and 2017 (q1, q2)
- Sample: women aged 20-49
- Separate models for single and partnered

We estimate the following equation



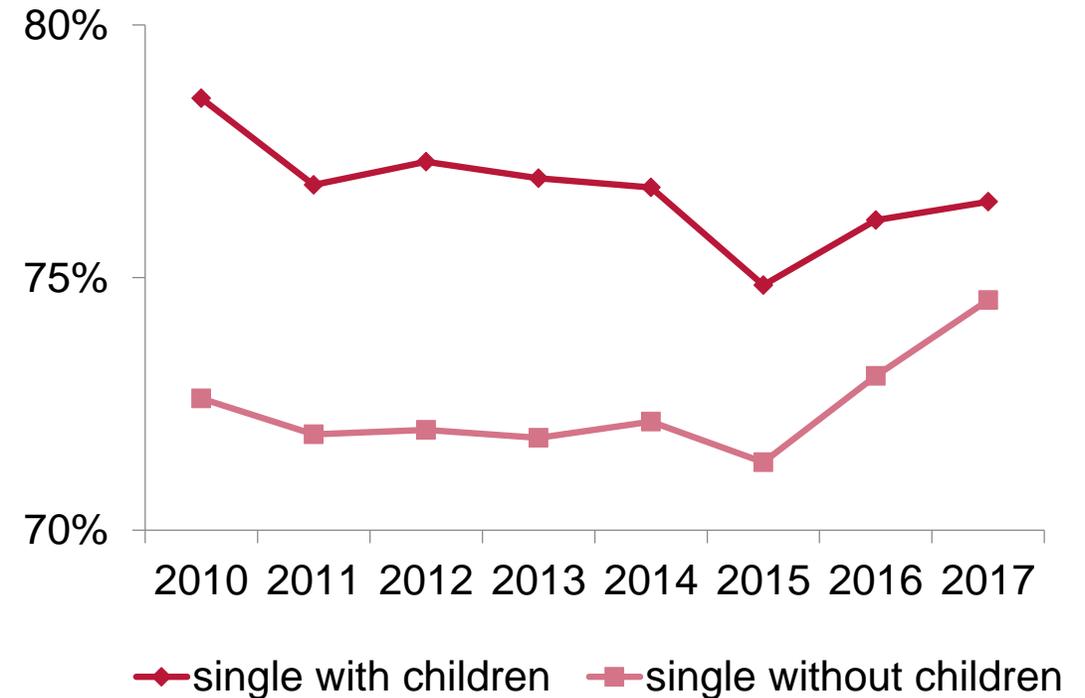
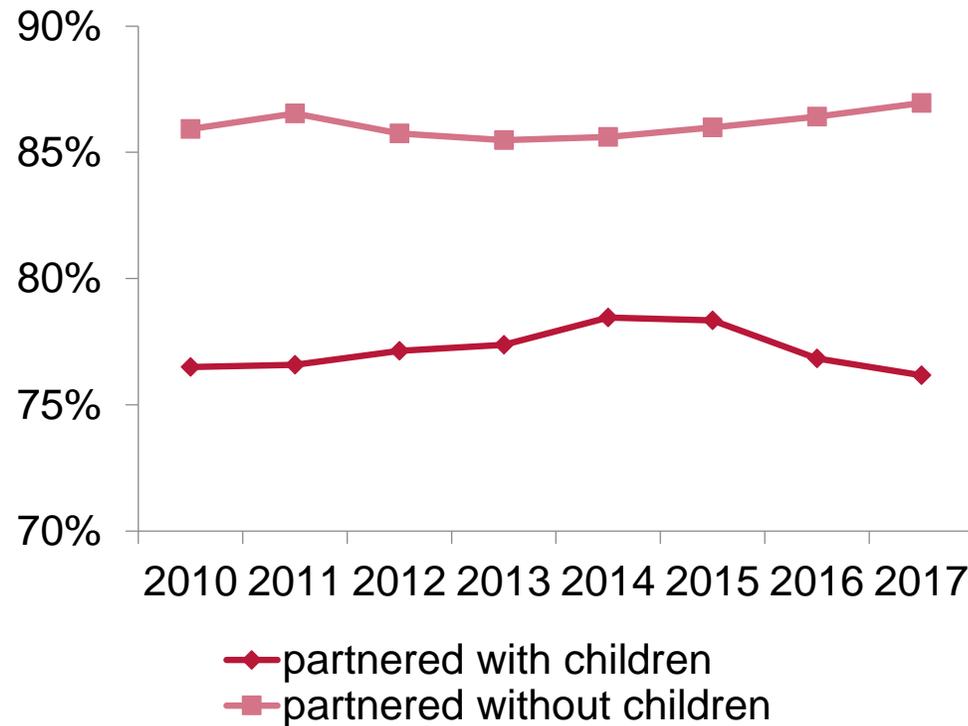
$$A_{it} = \alpha + \beta X_{it} + \gamma T_i + \delta Y_t + \theta Post_t * T_i + \varepsilon_{it}$$

- A_{it} – dummy for labour force participation
- X_{it} – vector containing a set of individual-specific characteristics (*age, education, size of place of residence, number of children, age of the youngest child, region, student status, partner's labour market status, partner's educational level*)
- Y_t – time-fixed effects
- T_i – treatment group variable (group effect)
- $Post$ - dummy for the period following the second quarter of 2016

Common trend assumption



Labour force participation rates of women aged 20-49



Note: 2017 only for the first half of the year.

Source: Own calculations based on Polish Labour Force Survey data.

Estimated impact of the 500+ on women's LFPR



- Both single and partnered mothers labour force participation might have been on average **2.4 pp** higher in the absence of the 500+

	Partnered women [1]	Single women [2]
Group effect	-0.059***	0.002
Treatment effect (2nd half of 2016 & 1st half of 2017)	-0.024***	-0.024***
Observations	299 662	159 506
R-squared	0.116	0.277

*Significance levels: *** 0.01, **0.05, * 0.1.*

Source: Own calculations based on Polish Labour Force Survey data.

The effect strengthened with time



	Partnered women [1]	Single women [2]
Treatment effect in the 2nd half of 2016 (θ_{2016})	-0.017**	-0.014
Treatment effect in the 1st half of 2017 (θ_{2017})	-0.027***	-0.029**
Observations	299 662	159 506
R-squared	0.116	0.277

*Significance levels: *** 0.01, **0.05, * 0.1.*

Source: Own calculations based on Polish Labour Force Survey data.

The effect in absolute terms: around 100 thousand women (lower boundary estimates)

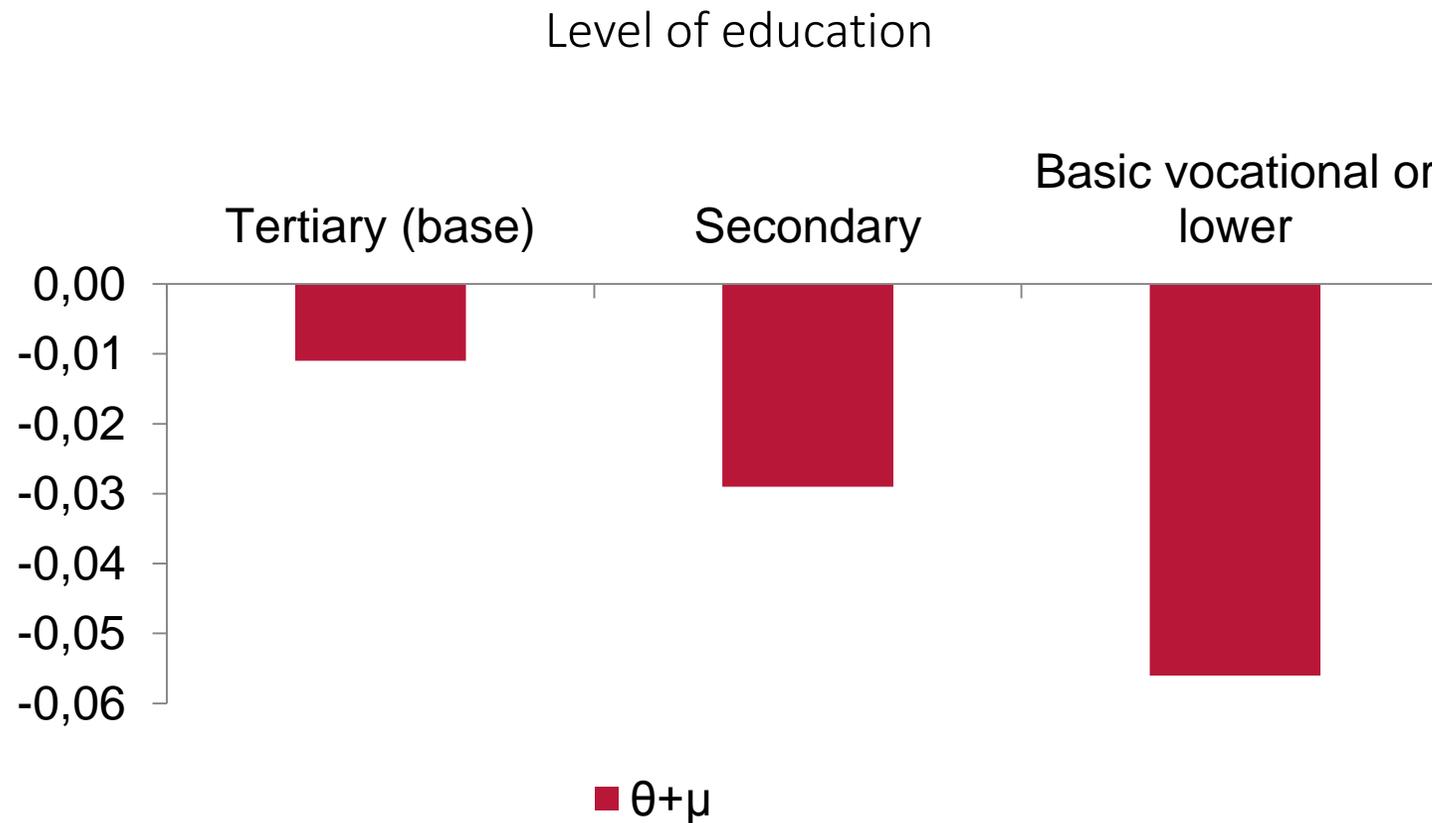
Heterogeneous treatment effects



Separately for each socio-economic variable X :

$$A_{it} = \alpha + \beta X_{it} + \delta Y_t + \gamma T_i + \delta T_i X_{it} + \theta Post_t * T_i + \mu Post_t * T_i X_{it} + \rho Post_t X_{it} + \varepsilon_{it}$$

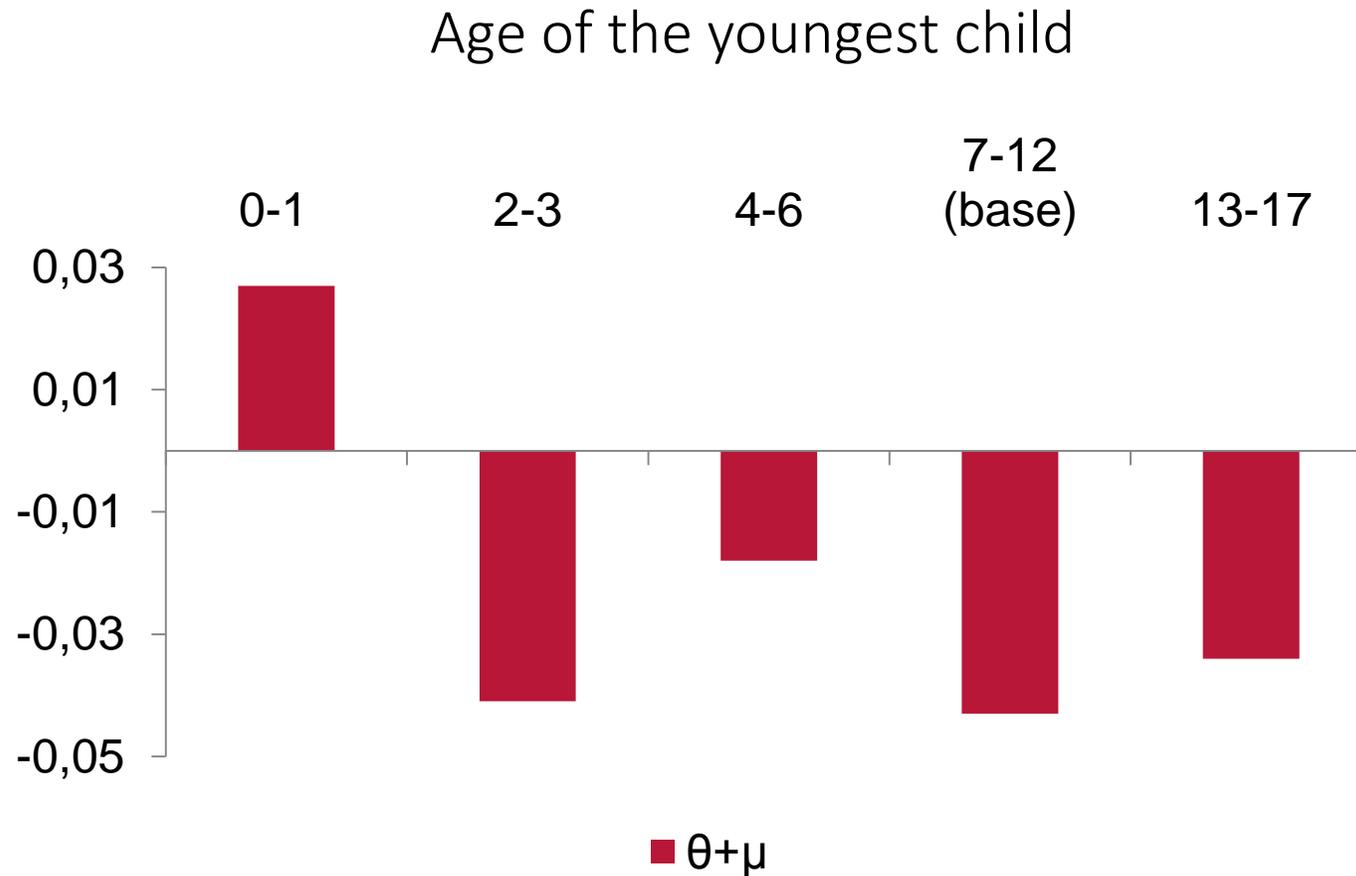
Heterogeneous treatment effects for partnered women



Separately for each socio-economic variable X:

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Heterogeneous treatment effects for partnered women



Separately for each socio-economic variable X:

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Conclusions



- The Family 500+ had a negative impact on labour force participation of mothers
- The effect strengthened with time
- The effect was stronger for single mothers
- Among partnered women, those with lowest educational level reacted most strongly

Questions for further research



- This effect in the longer term
- The extent to which 500+ may lengthen career interruptions of mothers
- The effect on labour supply of men and unregistered employment
- The effect of the benefit on fertility

Working paper:

Magda, I., Kielczewska, A., Brandt, N. (2018). The “Family 500” child allowance and female labour supply in Poland. *IBS Working Paper 01/2018*.

<http://ibs.org.pl/publications/program-rodzina-500-a-podaz-pracy-kobiet-w-polsce>

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