Labor supply effects of a universal cash transfer

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Motivation

- Relevant: universal cash transfers increasingly discussed (Banerjee, Niehaus, and Suri, 2019; Hoynes and Rothstein, 2019)
- Question: Do universal cash transfers discourage work?
- Limited quasi-experimental evidence: identification problems and the lack of such policies

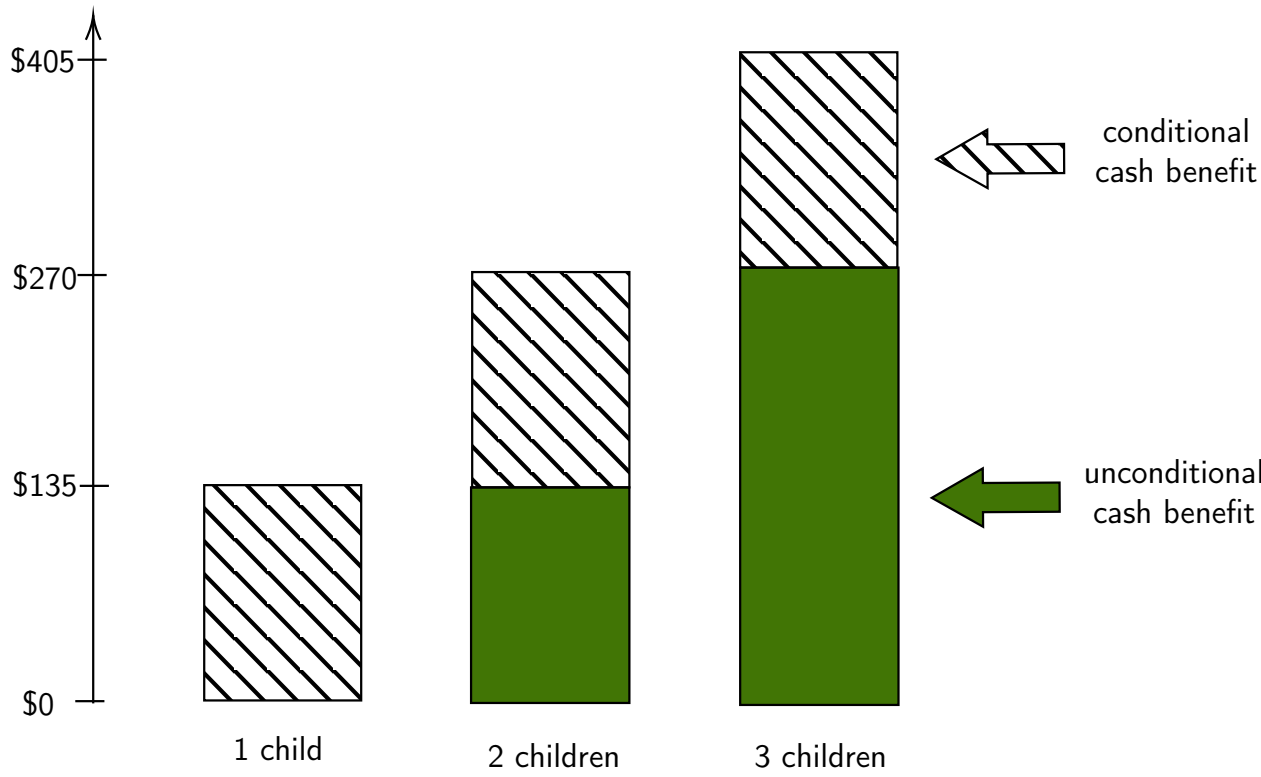
Preview of results

- I analyze the pure income effect of the introduction of universal child benefit in Poland on maternal labor supply
- Data: Labor Force Survey and Household Budget Survey
- The pure income effect was very small and statistically insignificant both on extensive and intensive margin
- Large spending effects

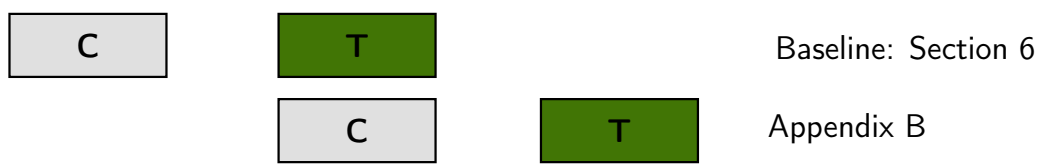
Literature: universal cash transfers

- Small-sized experiments (Akee et al., 2010; Banerjee, Hanna, et al., 2017; Price and Song, 2018)
- Lotteries (Cesarini et al., 2017)
- State-wide UBI programs (Jones and Marinescu, 2018; Salehi-Isfahani and Mostafavi-Dehzooei, 2018)

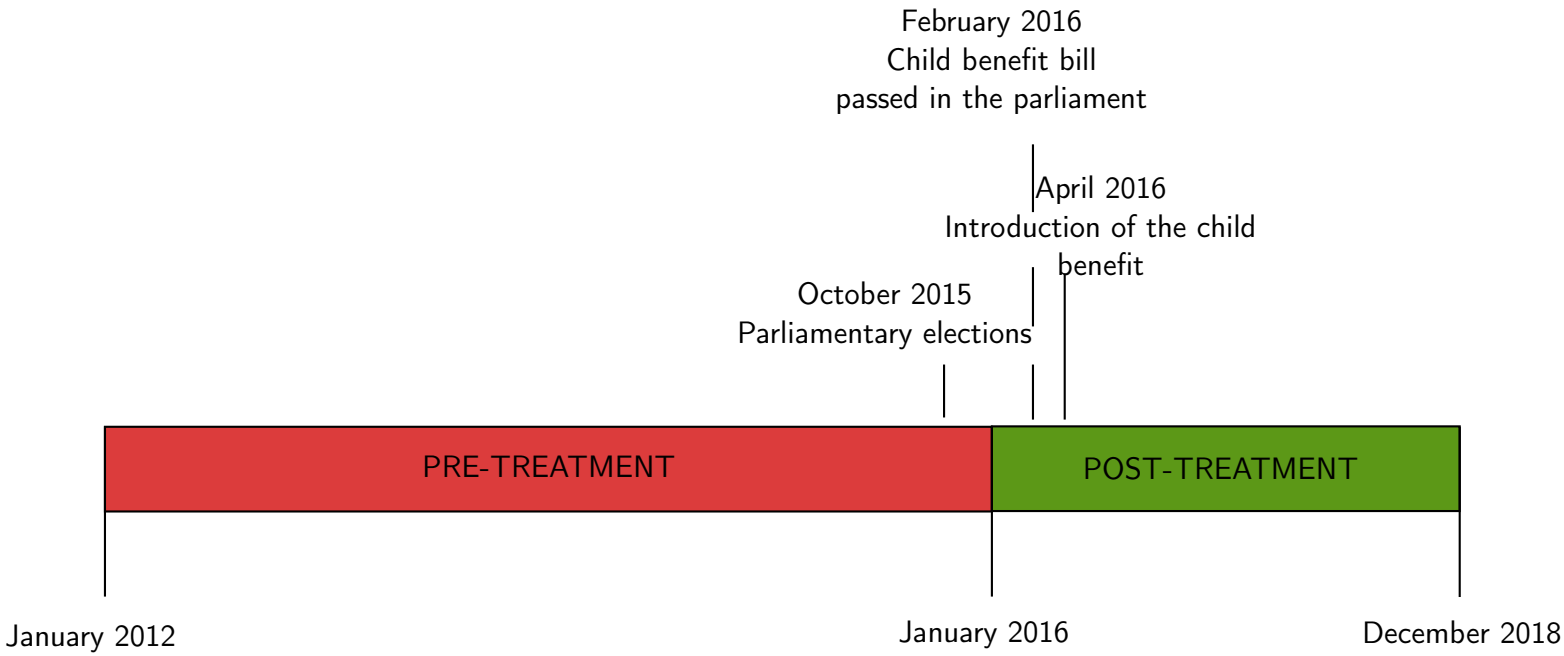
Design of the program



Identification: **T**reatment vs. **C**ontrol



Timeline of the program: unexpected shock



Identification strategy and data

DID specification:

$$L_{it} = \alpha_0 + \gamma T_i + \phi Y_t^{post} + \theta T_i * Y_t^{post} + \beta X_{it} + \epsilon_{it} \qquad (1)$$

T_i: 1 for mothers of two children aged 3-17, 0 for mothers of one child aged 3-17

Primary data source: Labor Force Survey

- labor market status
- hours worked
- labor market flows

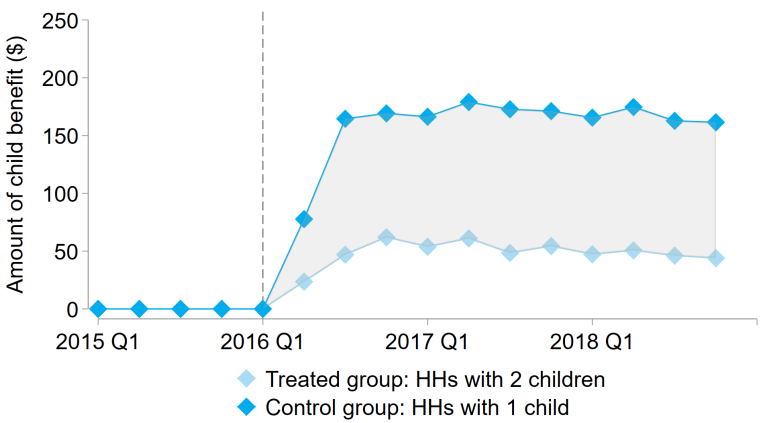
Supplementary data source: Household Budget Survey

- income divided into categories (incl. child benefit)
- spending divided into categories

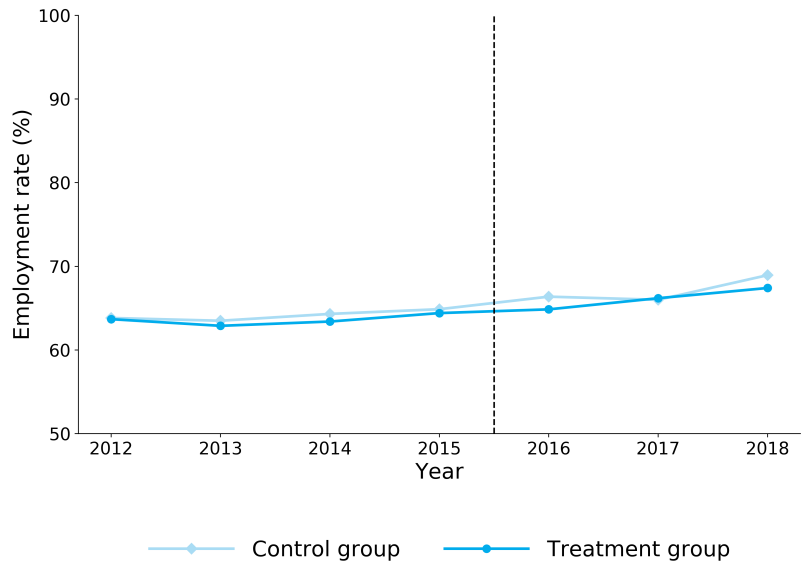
Sample: partnered mothers aged 29-49, no farm, no children with disabilities.

Descriptive evidence

(a) Child benefit amount (USD)



(b) Employment rate



Average income

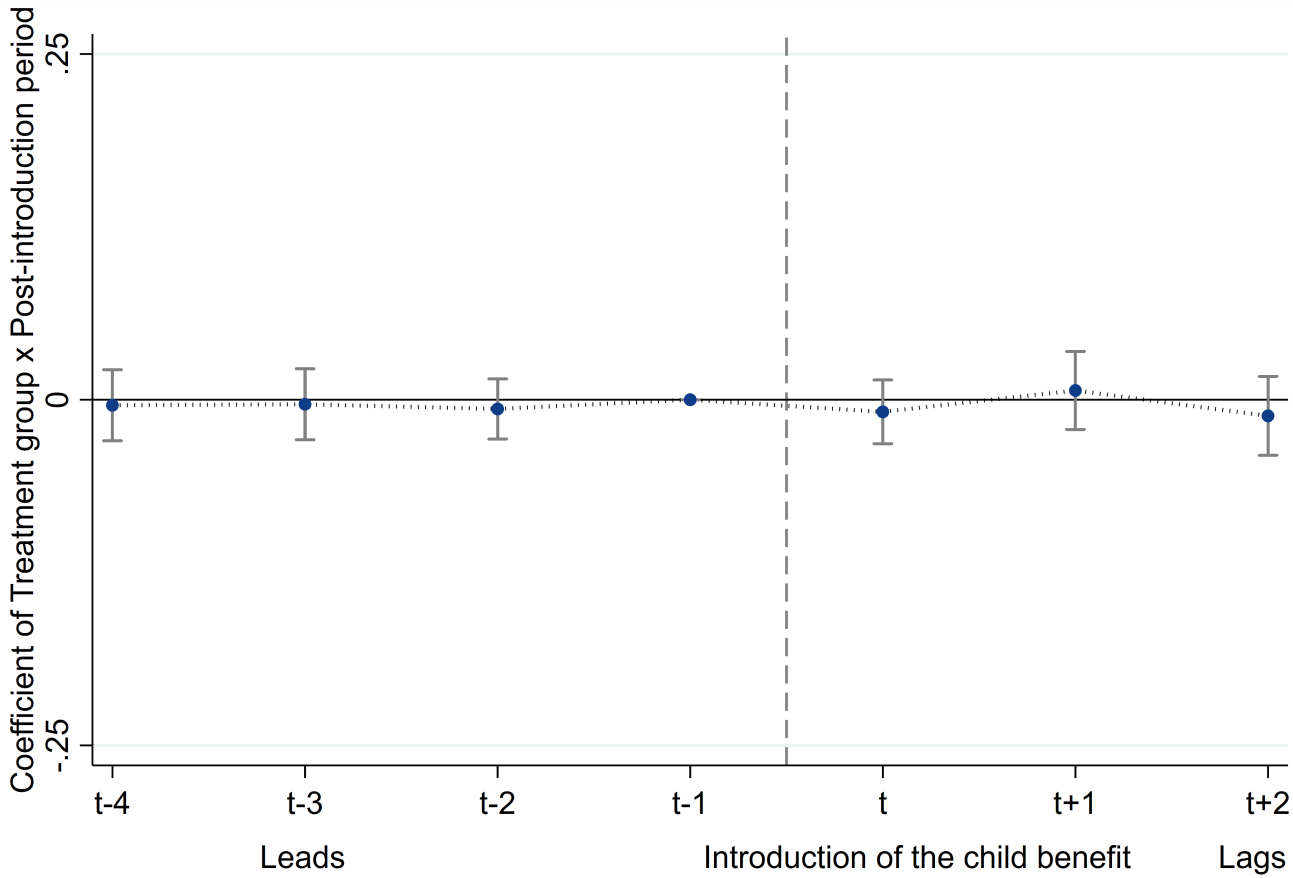
Pure Income Effect: employment

	(1) Employed	(2) Employed	(3) Employed	(4) Employed	(5) Employed	(6) Employed
Treatment group	-0.004	-0.001	-0.001	-0.001	-0.001	-0.001
× Post-treatment period	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.09	0.09	0.09	0.09	0.09
Mean of outcome	0.63	0.63	0.63	0.63	0.63	0.63
N	125475	125475	125475	125475	125475	125475

Notes: Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

Employment: HBS data | Intensive margin: working hours | Intensive margin: earnings

Leads and lags of the treatment effect



Notes: Each data point represents the point estimate and 95% confidence interval of the coefficient on interaction of treatment group dummy and year. Confidence intervals are based on standard errors that are clustered at the level of the household.
Data: Labor Force Survey

HBS data Fathers

Robustness tests

Balance table

Alternative specification: Pure Income Effect: 2 children vs. 3 children

Alternative treatment period start: April 2016 September 2016

Alternative outcomes: Labor force participation Unemployment

Alternative sample: Longer pre-treatment period Incl. agriculture Single mothers

Controlling for group-specific time trend

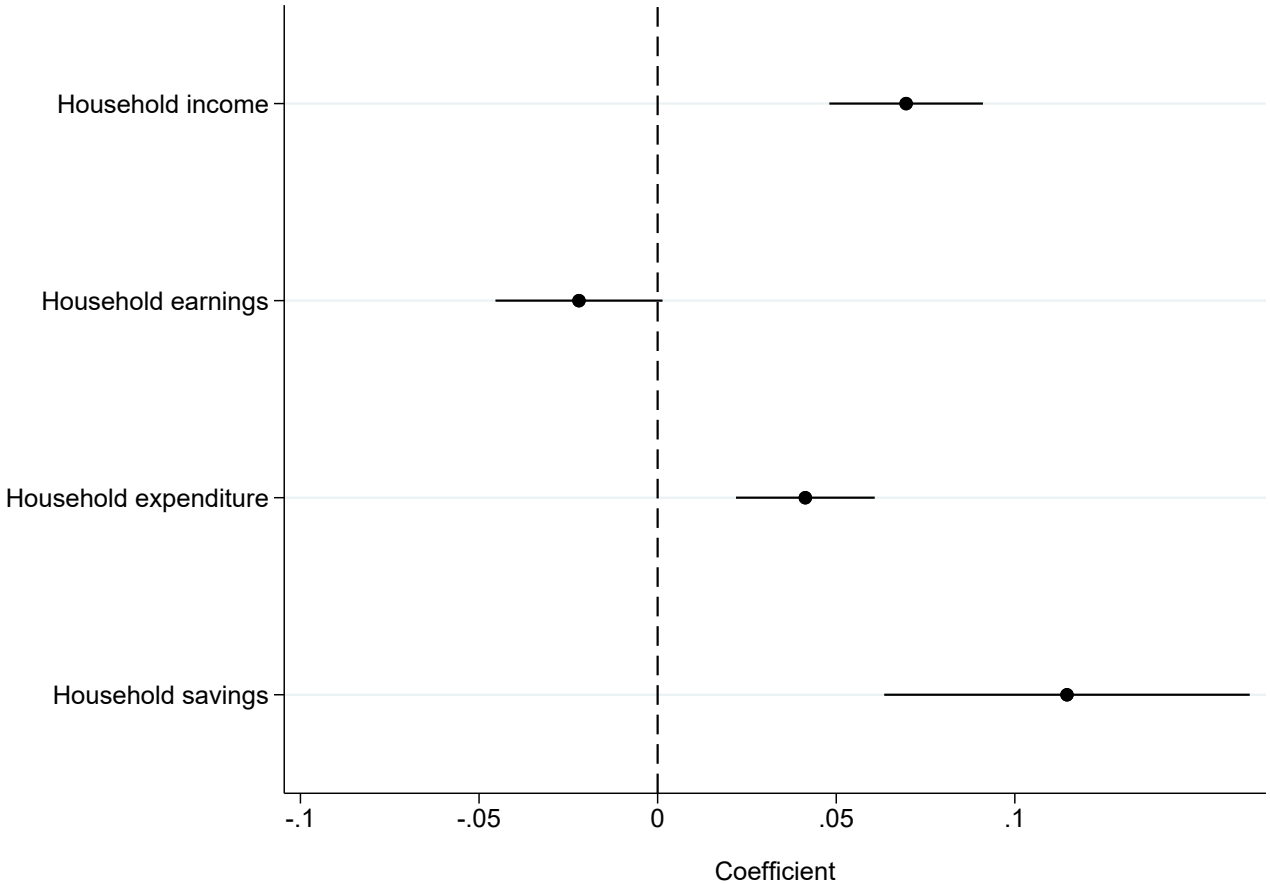
Heterogeneity: Age of the youngest child Education Area of living

Partner's occupation

Labor market flows: Employment $\longrightarrow$ Non-employment

Non-employment $\longrightarrow$ Employment

Income, earnings, spending and savings



Notes: Figure shows the effects of the introduction of unconditional child benefit on household income, earnings, spending and savings (point estimates and the 95% confidence intervals). Confidence intervals are based on standard errors that are clustered at the level of the household. Data: Household Budget Survey

Spending by categories | Detailed earnings | Extreme poverty | Relative poverty

Conclusions

- The impact of a large universal cash transfer on parental labor supply was very small and statistically insignificant
- General equilibrium effects may differ but unlikely (Jones and Marinescu, 2018)
- Efficiency? Not this study.
- UBI increase recipients' income without distorting their labor supply decisions

References I

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Banerjee, Abhijit, Paul Niehaus, and Tavneet Suri (2019). "Universal basic income in the developing world". In: *Annual Review of Economics* 11, pp. 959–983.

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Hoynes, Hilary and Jesse Rothstein (2019). "Universal basic income in the United States and advanced countries". In: *Annual Review of Economics* 11, pp. 929–958.


Jones, Damon and Ioana Marinescu (2018). "The labor market impacts of universal and permanent cash transfers: Evidence from the Alaska permanent fund". In: *NBER Working Paper*.


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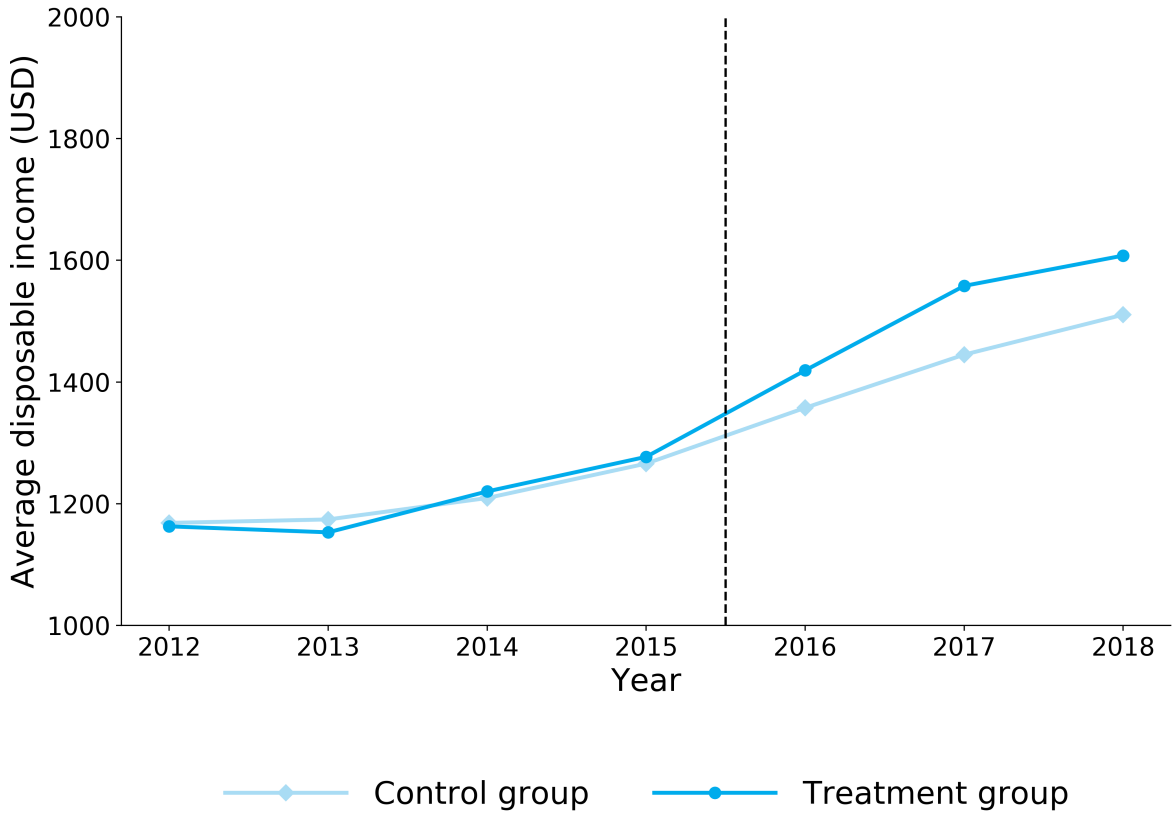
Balance table

	Mothers of one child		Mothers of two children	
	Pre-treatment (mean)	Post-treatment (mean)	Pre-treatment (mean)	Post-treatment (mean)
DID Variables				
Treatment group	0.00	0.00	1.00	1.00
Post-treatment	0.00	1.00	0.00	1.00
Dependent Variables				
Employed	0.64	0.67	0.63	0.66
Unemployed	0.07	0.03	0.07	0.03
Active	0.79	0.80	0.76	0.76
Hours worked	24.26	25.32	23.84	24.84
Dependent Variables: Household Budget Survey				
Household disposable income (USD)	1188.99	1415.73	1184.80	1501.55
Household total earnings (USD)	1040.58	1211.74	1025.88	1186.90
Household expenditure (USD)	928.61	1005.12	946.06	1058.94
Household savings (USD)	260.38	410.61	238.74	442.61
Control Variables				
Age	36.09	38.34	36.52	37.90
Education: primary (ref. level)	0.20	0.18	0.24	0.19
Education: secondary	0.35	0.32	0.36	0.32
Education: tertiary	0.44	0.50	0.40	0.50
Not disable (ref. level)	0.97	0.97	0.98	0.98
Disable	0.03	0.03	0.02	0.02
Rural area (ref. level)	0.30	0.31	0.36	0.37
Small town	0.37	0.36	0.36	0.33
Large town	0.34	0.33	0.28	0.29
N	45310	28087	31293	20785

HBS data Back

Average disposable household income



Data: Labor Force Survey

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DID results: working hours

	(1) hours worked	(2) hours worked	(3) hours worked	(4) hours worked	(5) hours worked	(6) hours worked
Treatment group	-0.069	0.080	0.075	0.087	0.080	0.070
× Post-treatment period	(0.377)	(0.361)	(0.361)	(0.360)	(0.360)	(0.360)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.08	0.08	0.08	0.08	0.08
Mean of outcome	23.84	23.84	23.84	23.84	23.84	23.84
N	125475	125475	125475	125475	125475	125475

Notes: Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

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DID results: individual earnings

	(1) Individual earnings	(2) Individual earnings	(3) Individual earnings	(4) Individual earnings	(5) Individual earnings	(6) Individual earnings
Treatment group	-2.448	-1.567	-1.545	-0.403	-0.416	-0.133
× Post-treatment period	(8.106)	(7.097)	(7.094)	(7.033)	(7.032)	(7.037)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.01	0.23	0.23	0.25	0.25	0.25
Mean of outcome	331.53	331.53	331.53	331.53	331.53	331.53
N	43736	43736	43736	43736	43736	43736

Notes: Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Household Budget Survey

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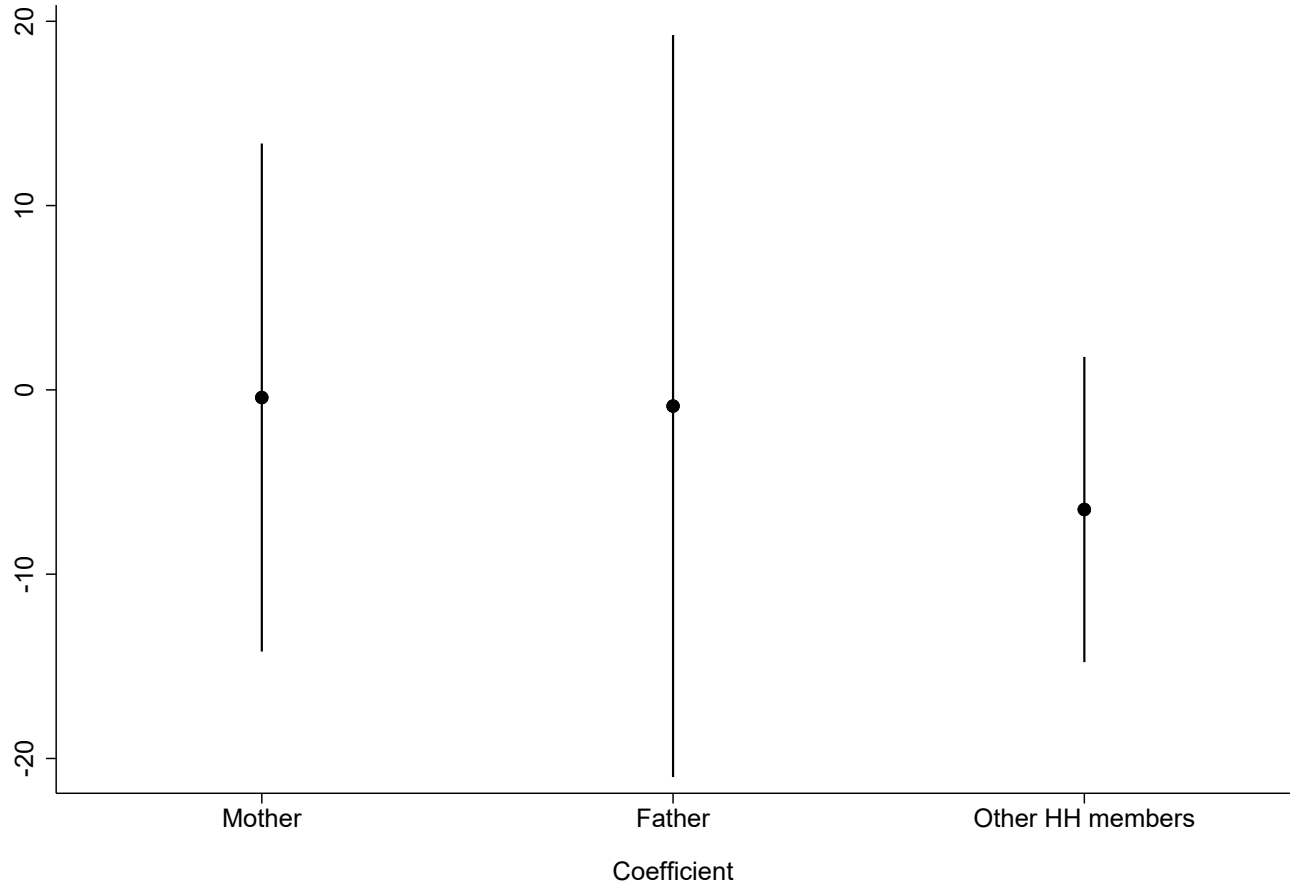
Earnings effects



Notes: Figure shows the effects of the introduction of unconditional child benefit on individual earnings of the mother, father and other household members (mostly grandparents and children). I control for individual characteristics (age, education level, disability, and the type of residence area) and region fixed effects (NUTS-2 regions). Confidence intervals are based on standard errors that are clustered at the level of the household.
Data: Household Budget Survey

DID results: individual earnings

	(1) Individual earnings	(2) Individual earnings	(3) Individual earnings	(4) Individual earnings	(5) Individual earnings	(6) Individual earnings
Treatment group	-2.448	-1.567	-1.545	-0.403	-0.416	-0.133
× Post-treatment period	(8.106)	(7.097)	(7.094)	(7.033)	(7.032)	(7.037)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.01	0.23	0.23	0.25	0.25	0.25
Mean of outcome	331.53	331.53	331.53	331.53	331.53	331.53
N	43736	43736	43736	43736	43736	43736

Notes: Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Household Budget Survey

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DID results: extreme poverty

	(1) Extreme poverty	(2) Extreme poverty	(3) Extreme poverty	(4) Extreme poverty	(5) Extreme poverty	(6) Extreme poverty
Treatment group	-0.031***	-0.029***	-0.029***	-0.030***	-0.029***	-0.028***
× Post-treatment period	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.02	0.05	0.05	0.05	0.06	0.06
Mean of outcome	0.09	0.09	0.09	0.09	0.09	0.09
N	43588	43588	43588	43588	43588	43588

Notes: Table shows the effects of the introduction of unconditional child benefit on probability of household living in extreme poverty (disposable income below the poverty line in Poland). Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Household Budget Survey

Back

DID results: relative poverty

	(1) Relative poverty	(2) Relative poverty	(3) Relative poverty	(4) Relative poverty	(5) Relative poverty	(6) Relative poverty
Treatment group	-0.053***	-0.048***	-0.048***	-0.049***	-0.048***	-0.047***
× Post-treatment period	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.02	0.12	0.12	0.13	0.13	0.13
Mean of outcome	0.25	0.25	0.25	0.25	0.25	0.25
N	43588	43588	43588	43588	43588	43588

Notes: Table shows the effects of the introduction of unconditional child benefit on probability of household living in relative poverty. Relative poverty (at-risk-of-poverty) is defined by Eurostat as having disposable income below 60% of the national median disposable income. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Household Budget Survey

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DID results: mothers of 3 children vs 2 child

	(1) Employed	(2) Employed	(3) Employed	(4) Employed	(5) Employed	(6) Employed
Treatment group	-0.009	-0.006	-0.006	-0.007	-0.007	-0.007
× Post-treatment period	(0.019)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.01	0.12	0.12	0.12	0.12	0.12
Mean of outcome	0.49	0.49	0.49	0.49	0.49	0.49
N	61395	61395	61395	61395	61395	61395

Notes: Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

Back

DID results: treatment period starting in April 2016

	(1) Employed	(2) Employed	(3) Employed	(4) Employed	(5) Employed	(6) Employed
Treatment group	-0.002	0.001	0.000	0.000	0.000	-0.000
× Post-treatment period	(0.010)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.09	0.09	0.09	0.09	0.09
Mean of outcome	0.63	0.63	0.63	0.63	0.63	0.63
N	125475	125475	125475	125475	125475	125475

Notes: The pre-treatment period includes observations from the period 01/2012-03/2016, and the post-treatment period includes observations from the period 04/2016-12/2017. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

Back

DID results: treatment period starting in September 2016

	(1) Employed	(2) Employed	(3) Employed	(4) Employed	(5) Employed	(6) Employed
Treatment group	0.001	0.003	0.002	0.002	0.002	0.002
× Post-treatment period	(0.010)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.09	0.09	0.09	0.09	0.09
Mean of outcome	0.63	0.63	0.63	0.63	0.63	0.63
N	125475	125475	125475	125475	125475	125475

Notes: The pre-treatment period includes observations from the period 01/2012-08/2016, and the post-treatment period includes observations from the period 09/2016-12/2017. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

Back

DID results: longer time period, 2008-2017

	(1) Employed	(2) Employed	(3) Employed	(4) Employed	(5) Employed
Treatment group	-0.009	-0.003	-0.003	-0.002	-0.003
× Post-treatment period	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)
Ind. characteristics	no	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes
Region FE	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	yes
Adj. R-Squared	0.00	0.09	0.09	0.09	0.09
Mean of outcome	0.63	0.63	0.63	0.63	0.63
N	181046	181046	181046	181046	181046

Notes: The pre-treatment period includes observations from the period 2008-2015, and the post-treatment period includes observations from the period 2016-2017. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

Back

DID results: including households that own a farm

	(1) Employed	(2) Employed	(3) Employed	(4) Employed	(5) Employed	(6) Employed
Treatment group	-0.009	-0.006	-0.006	-0.005	-0.005	-0.005
× Post-treatment period	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.07	0.07	0.07	0.07	0.07
Mean of outcome	0.67	0.67	0.67	0.67	0.67	0.67
N	150803	150803	150803	150803	150803	150803

Notes: Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

Back

DID results: single mothers

	(1) Employed	(2) Employed	(3) Employed	(4) Employed	(5) Employed	(6) Employed
Treatment group	0.004	0.003	0.003	0.001	0.001	0.002
× Post-treatment period	(0.024)	(0.023)	(0.023)	(0.022)	(0.022)	(0.023)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.01	0.12	0.12	0.13	0.13	0.13
Mean of outcome	0.63	0.63	0.63	0.63	0.63	0.63
N	19852	19852	19852	19852	19852	19852

Notes: Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

Back

Treatment group-specific linear time trend

	(1) Employed	(2) Active	(3) Unemployed
Treatment group	0.002	-0.012	-0.002
× Post-treatment period	(0.012)	(0.011)	(0.006)
Ind. characteristics	yes	yes	yes
Year FE	yes	yes	yes
Region FE	yes	yes	yes
Treatment group-specific time trend	yes	yes	yes
Adj. R-Squared	0.09	0.11	0.02
Mean of outcome	0.63	0.63	0.63
N	181046	181046	181046

Notes: In all regression, I control for baseline controls as well as treatment group-specific linear time trend. The pre-treatment period includes observations from the period 2008-2015, and the post-treatment period includes observations from the period 2016-2017. I use a longer time window to better estimate the coefficient on time trend. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

Back

Treatment effects: age of the youngest child

	(1) 0-5 years	(2) 6-11 years	(3) 12-18 years
Treatment group	0.016	-0.011	-0.022
× Post-treatment period	(0.014)	(0.014)	(0.019)
Ind. characteristics	yes	yes	yes
Year FE	yes	yes	yes
Region FE	yes	yes	yes
Regional unemployment rate	yes	yes	yes
Adj. R-Squared	0.10	0.09	0.08
Mean of outcome	0.56	0.68	0.70
N	49642	44349	31484

Notes: Column 1 shows the results for mothers with the youngest child between 0 to 5 years old. Column 2 shows the results for mothers with the youngest child between 6 to 11 years old. Column 3 shows the results for mothers with the youngest child between 12 to 18 years old. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

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Treatment effects: mother's age

	(1) 25-29 years	(2) 30-39 years	(3) 40-49 years
Treatment group	-0.034	0.011	-0.017
× Post-treatment period	(0.057)	(0.012)	(0.014)
Ind. characteristics	yes	yes	yes
Year FE	yes	yes	yes
Region FE	yes	yes	yes
Regional unemployment rate	yes	yes	yes
Adj. R-Squared	0.07	0.07	0.08
Mean of outcome	0.40	0.63	0.70
N	8483	73593	42919

Notes: Column 1 shows the results for mothers aged between 18 and 29 years old. Column 2 shows the results for mothers aged between 30 and 39 years old. Column 3 shows the results for mothers aged between 40 and 49 years old. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

Back

Treatment effects: education level

	(1) Primary	(2) Secondary	(3) Tertiary
Treatment group	-0.019	-0.021	0.008
× Post-treatment period	(0.022)	(0.017)	(0.012)
Ind. characteristics	yes	yes	yes
Year FE	yes	yes	yes
Region FE	yes	yes	yes
Regional unemployment rate	yes	yes	yes
Adj. R-Squared	0.05	0.06	0.04
Mean of outcome	0.44	0.60	0.78
N	26961	43284	55230

Notes: Column 1 shows the results for mothers with primary education. Column 2 shows the results for mothers with secondary education. Column 3 shows the results for mothers with tertiary education. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

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Treatment effects: type of area of living

	(1) Rural areas	(2) Town below 100 000	(3) Town above 100 000
Treatment group	-0.014	0.003	0.007
× Post-treatment period	(0.017)	(0.015)	(0.015)
Ind. characteristics	yes	yes	yes
Year FE	yes	yes	yes
Region FE	yes	yes	yes
Regional unemployment rate	yes	yes	yes
Adj. R-Squared	0.10	0.08	0.05
Mean of outcome	0.55	0.65	0.71
N	42758	44670	38047

Notes: Column 1 shows the results for mothers living in rural areas. Column 2 shows the results for mothers living in small towns (below 100 000 inhabitants). Column 4 shows the results for mothers living in large towns (above 100 000 inhabitants). Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

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Treatment effects: partner's occupation

	(1) High-skill	(2) Middle-skill	(3) Low-skill
Treatment group	0.013	-0.009	-0.013
× Post-treatment period	(0.014)	(0.015)	(0.031)
Ind. characteristics	yes	yes	yes
Year FE	yes	yes	yes
Region FE	yes	yes	yes
Regional unemployment rate	yes	yes	yes
Adj. R-Squared	0.04	0.09	0.08
Mean of outcome	0.74	0.58	0.64
N	40326	50496	11717

Notes: Column 1 shows the results for mothers, whose partners work in high-skill occupations (ISCO 1, ISCO 2, ISCO 3). Column 2 shows the results for mothers, whose partners work in middle-skill occupations (ISCO 4, ISCO 7, ISCO 8). Column 3 shows the results for mothers, whose partners work in low-skill occupations (ISCO 5, ISCO 9). Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

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Treatment effects: employment to non-employment flows

	(1) Not employed	(2) Not employed	(3) Not employed	(4) Not employed	(5) Not employed	(6) Not employed
Treatment group	0.005	0.002	0.001	0.001	0.001	-0.000
× Post-treatment period	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.01	0.01	0.01	0.01	0.02
N	34402	34402	34402	34402	34402	34402

Notes: Table shows difference-in-differences estimates of the effect of introducing universal child benefit on the probability of being employed conditional on working one year before. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

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Treatment effects: non-employment to employment flows

	(1) Employed	(2) Employed	(3) Employed	(4) Employed	(5) Employed	(6) Employed
Treatment group	-0.032*	-0.038**	-0.038**	-0.037**	-0.037**	-0.038**
× Post-treatment period	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.06	0.07	0.07	0.07	0.07
N	20814	20814	20814	20814	20814	20814

Notes: Table shows difference-in-differences estimates of the effect of introducing universal child benefit on the probability of being employed conditional on not working one year before. Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

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DID results: activity (employed or unemployed)

	(1) Active	(2) Active	(3) Active	(4) Active	(5) Active	(6) Active
Treatment group	-0.016*	-0.018**	-0.019**	-0.019**	-0.019**	-0.019**
× Post-treatment period	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.11	0.11	0.11	0.11	0.11
Mean of outcome	0.76	0.76	0.76	0.76	0.76	0.76
N	125475	125475	125475	125475	125475	125475

Notes: Table shows difference-in-differences estimates of the effect of introducing universal child benefit on the probability of being in labor force (working or actively looking for a job). Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

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DID results: unemployment

	(1) Unemployed	(2) Unemployed	(3) Unemployed	(4) Unemployed	(5) Unemployed	(6) Unemployed
Treatment group	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001
× Post-treatment period	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.01	0.02	0.02	0.02	0.02	0.02
Mean of outcome	0.07	0.07	0.07	0.07	0.07	0.07
N	125475	125475	125475	125475	125475	125475

Notes: Table shows difference-in-differences estimates of the effect of introducing universal child benefit on the probability of being unemployed (not working and actively looking for a job). Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Labor Force Survey

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Balance table: pre-treatment vs post-treatment (HBS)

	Mothers of one child		Mothers of two children	
	Pre-treatment (mean)	Post-treatment (mean)	Pre-treatment (mean)	Post-treatment (mean)
DID Variables				
Treatment group	0.00	0.00	1.00	1.00
Post-treatment	0.00	1.00	0.00	1.00
Dependent Variables				
Employed	0.68	0.69	0.64	0.65
Household disposable income (USD)	1188.99	1415.73	1184.80	1501.55
Household total earnings (USD)	1040.58	1211.74	1025.88	1186.90
Household expenditure (USD)	928.61	1005.12	946.06	1058.94
Household savings (USD)	260.38	410.61	238.74	442.61
Control Variables				
Age	36.41	38.93	36.59	38.17
Education: primary (ref. level)	0.26	0.22	0.29	0.23
Education: secondary	0.36	0.33	0.37	0.34
Education: tertiary	0.39	0.45	0.34	0.42
Not disable (ref. level)	0.97	0.98	0.98	0.98
Disable	0.03	0.02	0.02	0.02
Rural area (ref. level)	0.32	0.32	0.40	0.39
Urban area	0.68	0.68	0.60	0.61
N	14993	10154	10834	7755

Data: Household Budget Survey

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DID results: pure income effect (HBS)

	(1) Employed	(2) Employed	(3) Employed	(4) Employed	(5) Employed	(6) Employed
Treatment group	-0.005	-0.002	-0.002	-0.000	-0.000	-0.000
× Post-treatment period	(0.011)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Ind. characteristics	no	yes	yes	yes	yes	yes
Year FE	no	no	yes	yes	yes	yes
Region FE	no	no	no	yes	yes	yes
Regional unemployment rate	no	no	no	no	yes	yes
Region FE x Year FE	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.11	0.11	0.12	0.12	0.12
Mean of outcome	0.64	0.64	0.64	0.64	0.64	0.64
N	43736	43736	43736	43736	43736	43736

Notes: Standard errors are clustered at the level of the household.
* p<.10; ** p<.05; *** p<.01
Data: Household Budget Survey

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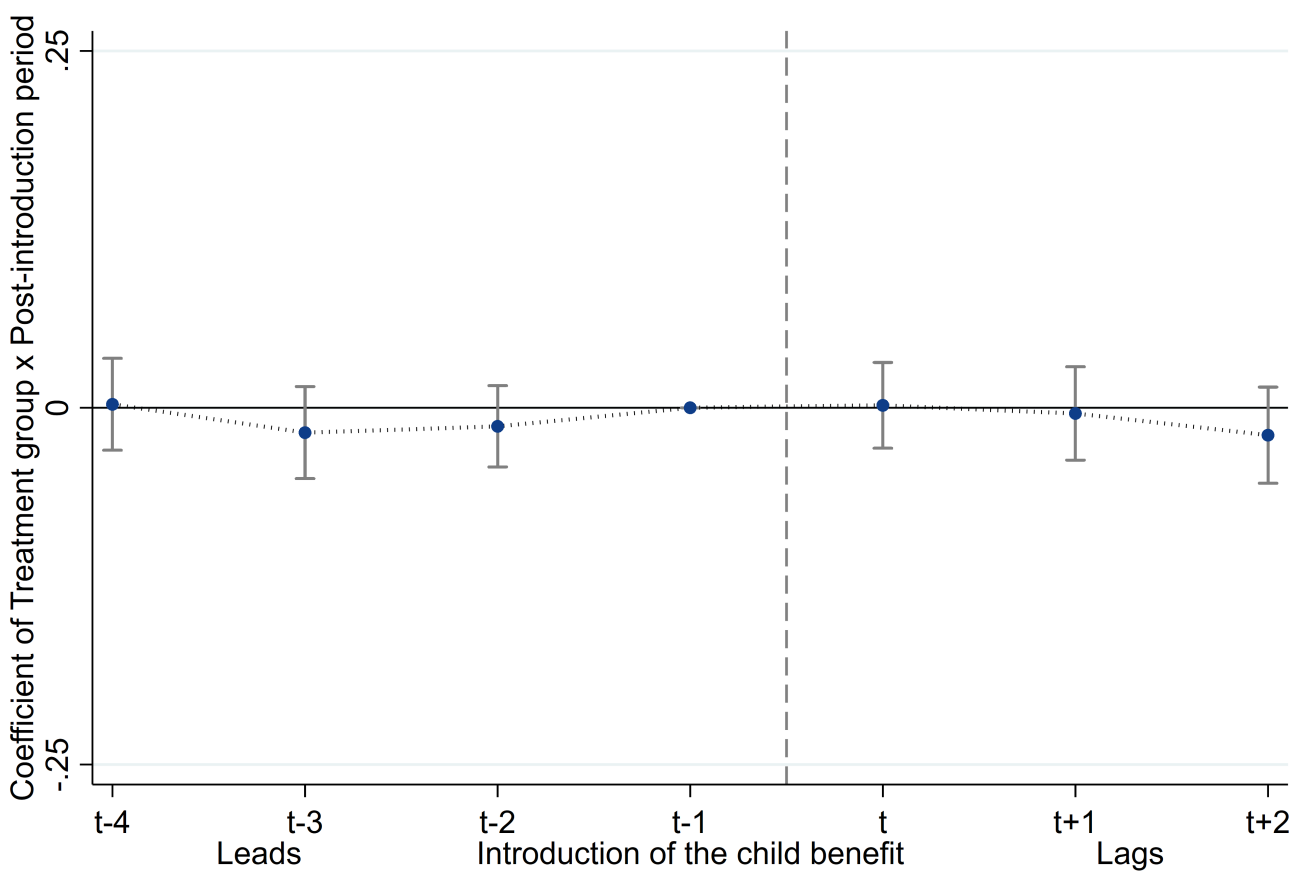
Leads and lags of the treatment effect (HBS)



Notes: Each data point represents the point estimate and 95% confidence interval of the coefficient on an interaction of treatment group dummy and year. Confidence intervals are based on standard errors that are clustered at the level of the household.
Data: Household Budget Survey

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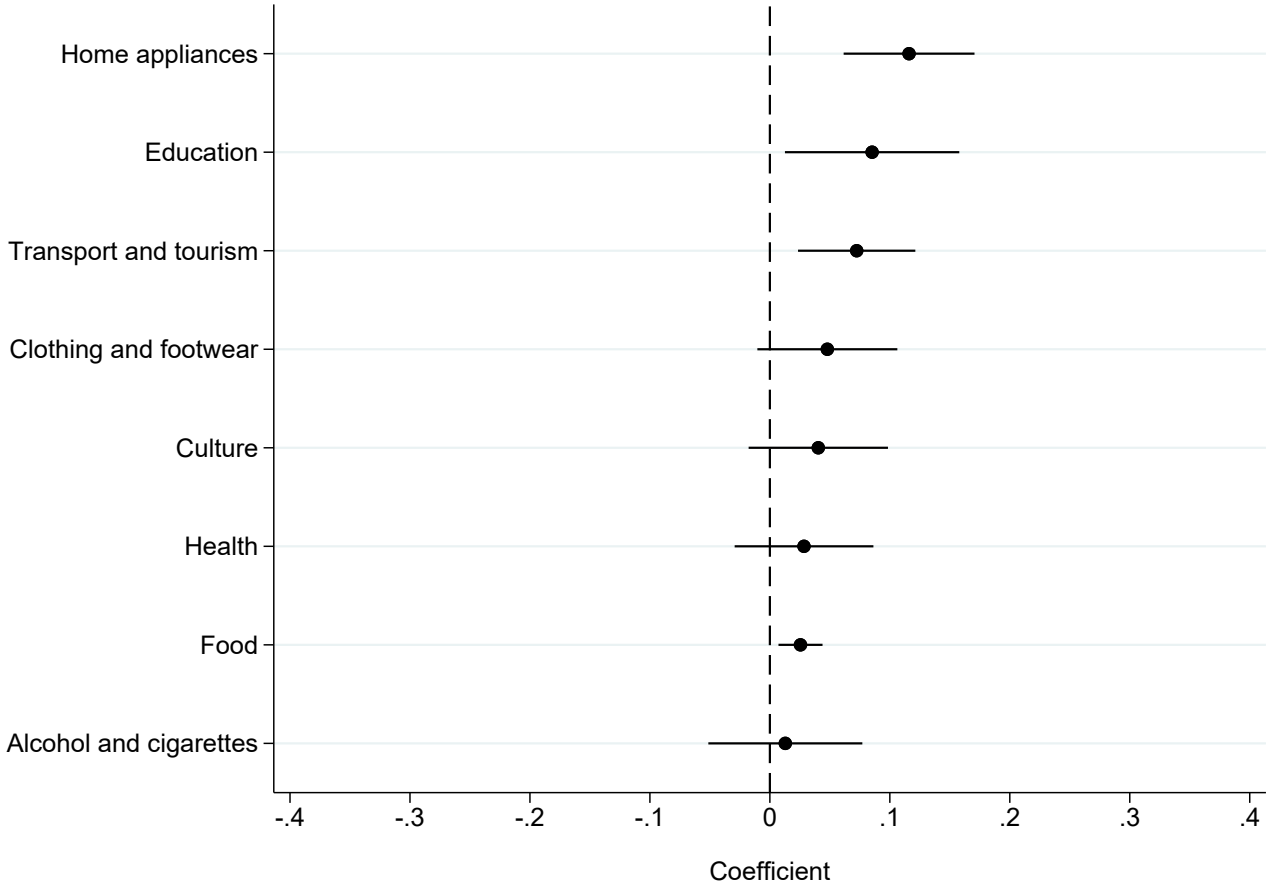
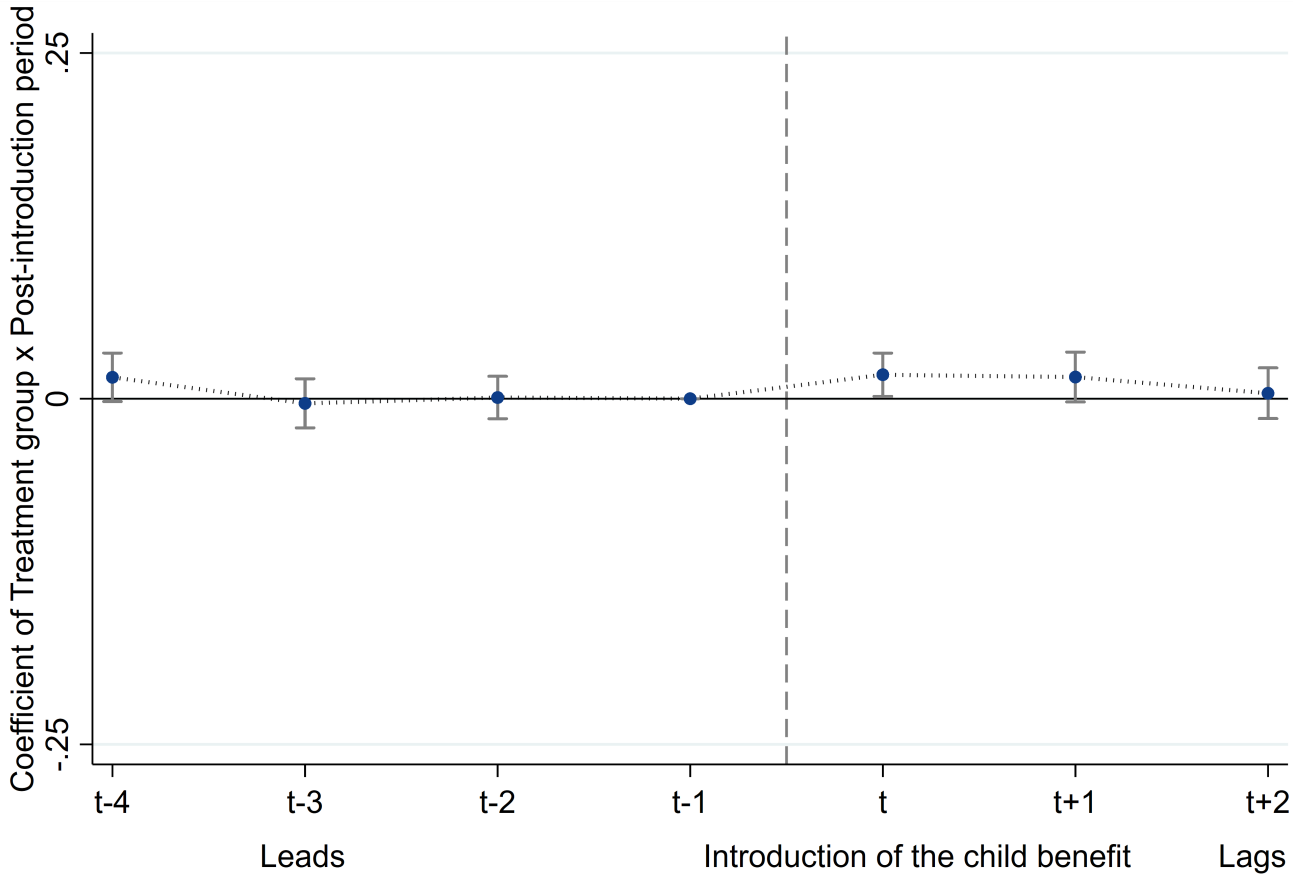
Spending effects: (1 vs. 2 children)



Notes: Figure shows the effects of the introduction of unconditional child benefit on log household expenditure in 12 categories (point estimates and the 95% confidence intervals). I control for individual characteristics (age, education level, disability, and the type of residence area) and region fixed effects (NUTS-2 regions). Confidence intervals are based on standard errors that are clustered at the level of the household.
Data: Household Budget Survey

Leads and lags: fathers



Notes: Each data point represents the point estimate and 95% confidence interval of the coefficient on an interaction of treatment group dummy and year. The treatment group consists of fathers of two children under the age of 18. The control group consists of fathers of one child under the age of 18. Confidence intervals are based on standard errors that are clustered at the level of the household.
Data: Labor Force Survey

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