

Labor Supply Effects of a Universal Cash Transfer*

Jan Gromadzki[†]

September 28, 2024

Abstract

I investigate the labor supply effects of the introduction of an exceptionally large unconditional cash benefit. I exploit the unique design of the child benefit program in Poland to identify the effects of the monthly transfer in a difference-in-differences design. The transfer had no short-term effects but caused sizable negative medium-term effects on household labor supply. In the medium run, population estimates indicate that for every extra 100 dollars in monthly child benefit transfers households received, they reduced their after-tax earnings by 25 dollars, spent 32 dollars on consumption, and saved 43 dollars. These negative labor supply effects are much larger and much more precisely estimated among households with low socioeconomic status. Additional evidence shows that the program had a positive impact on investments in human capital and home production efficiency.

JEL classification: I38, J21, J22

Keywords: unconditional cash transfer, income effects, labor supply, child benefit, poverty, difference-in-differences

*This paper has benefited from the financial support provided by the National Science Center, Poland (UMO-2018/31/N/HS4/00887) and the Polish-U.S. Fulbright Commission. I would like to thank Luca Bagnato, Michał Brzeziński, Paweł Bukowski, Ewa Gatacka-Burdziak, Hilary Hoynes, Hannah Illing, Iga Magda, Nelson Mesker, Jesse Rothstein, Benjamin Schoefer, and Gabriel Zucman for their valuable feedback. I also thank the seminar and conference participants at the SOLE, ESPE, and PhD-EVS for their comments and remarks. Declarations of interest: none. This paper uses Statistics Poland data. Statistics Poland has no responsibility for the results and the conclusions, which are those of the author.

[†]Department of Economics, Vienna University of Economics and Business; Institute for Structural Research (IBS); IZA. E-mail: jan.gromadzki@wu.ac.at.

1 Introduction

Unconditional cash transfers are increasingly being discussed in many countries (Banerjee, Niehaus, and Suri 2019; Hoynes and Rothstein 2019). Do unconditional transfers discourage work? This paper estimates the labor supply effects of the introduction of a large universal child benefit in Poland. Compared to the previous attempts to estimate the effects of income shocks, examining the issue in the Polish setting offers four main advantages. First, the design of the program created a plausible control group, since households with one child received no unconditional transfers. Second, the size of the shock was exceptional, as the per child monthly amount of the newly introduced transfer was equal to approximately 11 percent of average earnings, making it the most generous universal child benefit in high-income countries. Third, the Polish child benefit program introduced a completely new transfer without changing the scale or the eligibility rules of existing social assistance programs.

Drawing on data from a large survey on monthly income and expenditure, I compare the labor supply responses of two very similar groups using a difference-in-differences setup: namely, households with one child and households with two children. When comparing these two groups in the pre-treatment and the post-treatment period, the main difference between them was that households with two children received an unconditional cash transfer for their second child. The program also introduced a means-tested transfer for the first child, but eligibility rules were the same for both groups of parents. Therefore, the differences in the labor supply responses of these two groups of households can be primarily attributed to the income effect of this transfer. They cannot be interpreted as pure income effects because households with two children were also slightly more likely to receive a new means-tested transfer for their first child. Nevertheless, the estimated effects offer a useful upper bound of the income effects.

The estimated labor supply effects of receiving the unconditional transfer vary depending on the length of the effect. I find no short-term impact on household earnings and negative medium-term earnings responses. In the medium run, for every extra 100 dollars in monthly child benefit transfers households receive, they reduce their after-tax earnings by 25 dollars. The baseline results on earnings for the full sample are not precisely estimated, but they are stronger and statistically significant for low socioeconomic status households. These negative

responses are driven by reductions in maternal earnings. Despite these negative earnings effects, the introduction of the program substantially reduced child poverty.

Households used the additional income to increase their consumption and savings. To differentiate between different types of spending, I categorize them into three groups: investment in human capital (such as education and health), recreation (such as tourism and television sets), and harmful spending (such as high-sugar foods and alcohol). Households substantially increase their spending on goods and services related to investment and recreation. There is also a modest increase in harmful spending (12 percent of the additional spending), primarily due to the consumption of energy-dense, nutrient-poor foods. Finally, households expand their savings by 43 dollars out of every 100 dollars in additional income they receive. However, I find no effects on the purchases of financial or tangible assets. Instead, households place their additional savings in cash.

This paper contributes to the literature on the labor supply effects of unconditional cash transfers. In contrast to previous evaluations of universal cash transfers that relied on synthetic controls for the identification of labor supply effects (e.g., Jones and Marinescu 2022), my study uses a more straightforward difference-in-differences approach with a control group that was determined by explicit exclusion of one-child families from the universal child benefit by lawmakers. Unlike the Polish unconditional child benefit, many universal transfer schemes replace previously existing programs or reduce their availability (e.g., Price and Song 2018; Salehi-Isfahani and Mostafavi-Dehzoeei 2018; Verho, Hämäläinen, and Kanninen 2022). In such cases, the economic interpretation of the estimated effects is challenging and the results are less generalizable than the results of this study. An example of such a policy is the 2021 expanded child tax credit in the U.S. While recent studies find that the expansion had modest labor supply effects (Enriquez, Jones, and Tedeschi 2023; Pilkauskas et al. 2022), these estimates cannot be interpreted as income effects, as the levels of additional support households received depended on their income, and the expansion removed a potentially incentivizing phase-in of the credit. Given the limitations of the evaluations of unconditional cash transfers, earnings responses to lottery winnings have been widely used to calculate marginal propensities to earn out of unearned income. However, the estimated propensities vary substantially across countries. My medium-term estimates are slightly higher than the

modest propensities obtained by Cesarini et al. (2017) for Sweden and notably lower than the effects estimated by Golosov et al. (2024) for U.S. lottery winners.

This paper also contributes to the literature on the effects of safety net programs targeted at families with children. Aizer, Hoynes, and Lleras-Muney (2022) points out that the research on such programs has long focused on labor supply effects, while largely ignoring the benefits they generate. For example, Milligan and Stabile (2009), Schirle (2015), and Koebel and Schirle (2016) find some negative effects of the introduction of a child benefit in Canada on parental labor supply. Previous research shows that cash transfers may improve children's education and future earnings (e.g., Aizer et al. 2016; Bailey et al. 2024; Barr, Eggleston, and Smith 2022; Manoli and Turner 2018). By contrast, Bulman et al. (2021) find that the relationship between parental lottery winnings and their children's college attendance is very weak. Although it is too early to study the long-term effects of the Polish child benefit on children's outcomes in adulthood, I provide evidence on the short-term effects of the transfer on consumption, savings, and poverty. In particular, exploiting rich information on households' spending, I show that a considerable share of the additional spending can be classified as an investment in human capital or home production efficiency. Jones, Milligan, and Stabile (2019) find similar effects for means-tested child benefits in Canada. Moreover, I find that the program had a positive impact on the educational enrollment of adult children in households who received the new transfer.

2 Institutional Background

The universal child benefit was introduced in Poland following the election of a new government in October 2015. In February 2016, the parliament passed the law introducing the child benefit program. Starting in April 2016, parents could apply for the child benefit, and received the first transfers for the month in which they applied for it.

In the baseline empirical analysis, I treat the years 2012-2015 as the pre-treatment period, and the years 2016-2019 as the post-treatment period. The analysis ends in June 2019 as the program was expanded afterwards. Although the first transfers to parents were received in April 2016, the introduction of the program was announced by the government at the beginning of 2016. Therefore, households may have adjusted their labor supply a few months

before receiving the cash transfers. Alternatively, I define the beginning of the post-treatment period as April 2016 and September 2016¹, and show that the results of the analysis remain the same.

The design of the child benefit program is illustrated in Figure 1a. After the introduction of the program, all households were entitled to a monthly cash transfer of approximately 125 dollars (500 PLN) per child for the second child and for each subsequent child from birth to the age of 18. Hence, over a period of 18 years, the total payments a family could expect to receive per child amounted to 27,000 dollars. Additionally, there was a means-tested component of the child benefit whereby households were entitled to a child benefit of the same amount for their first child as well if their per person household income did not exceed 215 dollars. Importantly, the probability of receiving the means-tested child benefit for the first child was mechanically correlated with the number of children, as the income measure used for means testing was divided by the total count of parents and their dependent children under the age of 25.

Universal child benefits exist in many high-income countries but the scale of the income shock associated with the introduction of the Polish child benefit was unprecedented. The amount of the benefit per child was exceptionally large, as it was equal to 34 percent of the per capita disposable income among families with children. It was also large in absolute terms, as the purchasing power of the per child transfer was 25 percent larger than the Alaska Permanent Fund dividend. Figure 1b shows that the Polish child benefit was by far the most generous transfer among OECD countries, as the monthly payments were equal to more than 10 percent of average monthly earnings. Furthermore, countries with high child benefits introduced their programs decades ago and only gradually increased their generosity.² The annual cost of the program amounted to 1.2 percent of GDP.

Receiving the child benefits did not affect the eligibility of households for the existing social assistance programs, and the additional income was not subject to income tax. Moreover, the Polish tax system remained unchanged. Hence, the child benefit amounts parents received for their second and each subsequent child were the same, regardless of their income levels. The

1. The child benefit program was introduced in April 2016, but the program did not achieve full coverage until September 2016.

2. E.g., Luxembourg in 1985, Germany in 1954, and Belgium in 1939.

process of the distribution of the child benefit was handled by local authorities (municipalities), who received earmarked grants for the child benefit program directly from the central government budget. Over 2.5 million households in Poland received the child benefits. The design of the program remained unchanged until July 2019, when it was extended to all children under the age of 18 (Myck and Trzeciński 2019).

Magda, Brandt, and Kiełczewska (2020) provide the most comprehensive evaluation to date of the Polish child benefit program's effects on maternal labor supply. They find that, overall, the introduction of the child benefit had a significant negative impact on maternal labor supply. However, they compare childless couples to couples with children. Hence, they analyze the joint effects of the conditional and the unconditional component of the transfer.

3 Data and Identification Strategy

For my analysis, I use data from the Polish Household Budget Survey. The survey tracks the income and expenses of each household over one month. The Polish Household Budget Survey collects data on household spending using a diary method, with households recording all their purchases by filling in the name of the product or service purchased, as well as its quantity in kilograms or pieces and its value. Survey enumerators visit each surveyed household at least four times a month, providing instructions on record-keeping in the budget book and clarifying any questionable entries. Enumerators are also responsible for coding the names of the products and services as belonging to one of 400 detailed expenditure categories.

The respondents are also asked questions about the income they received in a given month. In 2016, a separate category for the child benefit was added to the income form. Hence, I can directly observe whether a household was receiving the child benefit. Moreover, the survey data contain information on household and individual characteristics, such as age, gender, and labor market status. In the original dataset, all variables related to income and expenditures are expressed in national currency (PLN). I convert those values into U.S. dollars using the annual average exchange rate for 2016, and adjusting the observations from other years for inflation. Household members include individuals living together and financing their consumption from joint resources.

In the baseline specification, I use repeated cross-section data to analyze the outcomes of households in which both parents are between the ages of 29 and 49 at the time of the introduction of the child benefit (born between 1967 and 1987; approximately 77 percent of households with one or two children). In the baseline, I focus on households with two parents, as they make up the vast majority of households with children in Poland (approximately 85 percent). Parents are defined as parents of the youngest child. I remove a very small group of households with at least one non-parent member aged 25-40 years old (less than 2 percent of the sample). I also exclude households who own a farm (approximately 5 percent of the sample) because measuring labor supply in the small-size agriculture sector using monthly survey data would be subject to sizable measurement error.

I use the difference-in-differences approach, and estimate the following equation:

$$(1) \quad Y_{i,t} = \alpha_0 + \gamma T_i + \phi_1 Post^{2016-2017} + \phi_2 Post_t^{2018-2019} + \theta_1 T_i * Post_t^{2016-2017} + \theta_2 T_i * Post_t^{2018-2019} + \beta X_{i,t} + \epsilon_{i,t}$$

where $Y_{i,t}$ measures the outcome of interest. T_i is the treatment variable that is equal to one for the parents of two children and to zero for the parents of one child. $Post^{2016-2017}$ is a dummy variable that is equal to one for the first part of the post-treatment period and to zero otherwise. $Post^{2018-2019}$ is a dummy variable that is equal to one for the second part of the post-treatment period and to zero otherwise. The coefficient θ_1 captures the short-term effect of the introduction of the cash transfer. The coefficient θ_2 captures the medium-term effect of the introduction of the cash transfer. Additionally, I control for a set of individual characteristics, including age, education, disability, and the type of the area of residence ($X_{i,t}$). Household-level outcomes include monthly total disposable income, earnings, expenditure and savings. Disposable income includes income from work (employee and self-employment earnings), private income from investment and property, transfers between households, and social transfers (child benefit, unemployment benefits, old-age pensions etc.). Earnings include employee wages and self-employment earnings. Savings are calculated as the difference between disposable incomes and expenditure. Individual-level outcomes include dummy variables for employment (non-zero monthly earnings) and full-time employment.

Households can self-select into treatment by increasing their fertility. Ideally, the treatment variable should be constructed based on the number of children in the household before the introduction of the child benefit (in 2015). As I am using repeated cross-sectional data, I have limited information about the number of children each family had in 2015. For example, the 2012 data only provide information about the children born up to 2012. Thus, I construct the treatment variable based on the number of children aged 3-17 in the household. For example, in the 2015 data, the treatment group consists of mothers with two children born between 1998 and 2012, and the control group consists of mothers with one child born between 1998 and 2012. Since the analysis ends in June 2019, the treatment variable is not affected by potentially endogenous births after the introduction of the child benefit (the first endogenous births should be observed in the second half of 2016). The DiD design is intent-to-treat for two reasons. First, eligible parents can decide whether or not to apply for the transfer. Second, I use the number of children aged 3-17 to assign households to groups, even though the child benefit is also paid for children under the age of three.

Figure 2a illustrates the "first stage" of the DiD study. Prior to 2016, the households in both the treatment and the control groups did not receive any child benefit payments. Following the introduction of the child benefit program, the households in the treatment group received significantly higher child benefit payments than those in the control group. One year into the program, over 92 percent of households in the treatment group reported receiving child benefit payments in their diaries. On average, the control group received non-zero child benefits. This is due to having children under the age of three and means-tested benefits for the first child. Figure 2b indicates that treated households were more likely to receive means-tested child benefits compared to the control group, in line with the mechanical relationship between the number of children and the per capita income measure used in the means test. This difference remains constant over time and is a small contribution to the overall difference in total amount of child benefit received.

4 Results

Table 1 summarizes the DiD estimates of the effects of the unconditional cash transfer. The introduction of the child benefit had a substantial positive impact on recipients' income both

in the short and medium term. In the short run, household earnings experienced virtually no reductions. Within the first two years, for every extra 100 dollars in monthly child benefit transfers households received, they reduced their after-tax earnings by 1 dollar, spent 45 dollars on consumption and saved 54 dollars. I find much larger but still statistically insignificant medium-term responses, with a 122 dollars transfer corresponding to a 30 dollars decrease in household earnings. It is worth noting that unweighted estimates of earnings effects are similar to the baseline estimates but more precise, and therefore statistically significant.³ Moreover, as I will demonstrate shortly, average effects mask significant heterogeneity that makes it much clearer that adverse statistically significant earnings effects were non-negligible. Taking these results at face value despite the insignificant coefficient on earnings, in the medium run, for every extra 100 dollars in monthly child benefit transfers households received, they reduced their after-tax earnings by 25 dollars, spent 32 dollars on consumption and saved 43 dollars. Hence, the rate at which households substituted their consumption for leisure was very similar to the rate at which they substituted their savings for leisure.

Effects on Earnings

Figure 3 shows that before the introduction of the child benefit, there were no significant differences between the treatment and the control group in the evolution of their disposable income and earnings. Hence, I cannot reject the parallel trends assumption. The introduction of the child benefit raised the disposable income in the treatment group but the effects declined over time, primarily as a result of negative medium-term earnings responses.⁴ In contrast to short-term effects, the point estimates of medium-term responses are relatively large after controlling for parental education (Table A.4). The estimates are not statistically significant, but additional decomposition and heterogeneity tests, discussed further in the text, provide a consistent pattern indicating non-negligible labor supply effects of the transfer, particularly among groups with lower earnings potential and weaker attachment to labor force. The negative earnings effects stabilize after the third year, suggesting that earnings converged to a new equilibrium. These dynamic responses are in line with findings from earlier studies by

3. In the baseline analysis, I apply sample weights, as unweighted sample differs substantially from the demographic structure of the Polish population (response rates are substantially larger for low socioeconomic status households than for high socioeconomic status households).

4. In addition, the real value of the transfer declined due to inflation, particularly in 2019.

Magda, Brandt, and Kielczewska (2020) and Premik (2022) who argue that the introduction of the child benefit program had a negative effect on the job search effort of mothers. Since treated households were more likely to receive the means-tested transfer compared to the control households, we may expect that the pure income effects would be smaller.

The negative medium-term effects are largely due to the negative effect on mothers' earnings (Table 2). This is mostly due to extensive margin adjustments, as the introduction of the transfer had significant negative effects on employment of mothers. I find no large effects on the labor supply of the fathers. Finally, I find modest negative effects on the earnings of adult children (Table A.9). The negative earnings effects are driven by reductions in employee earnings (Table 3). The medium-term effects on employee earnings are large and statistically significant: for each extra 100 dollars in monthly child benefit transfers households receive, they reduce their employee earnings by 36 dollars. Negative employee earnings responses were partly offset by small and statistically insignificant increases in self-employment income.

The heterogeneity analysis consistently shows that the transfer had large negative labor supply effects for low socioeconomic status households (Table 3). I find strong effects for households living in rural areas and for households where the mother has no college education. Due to the lack of longitudinal data, I cannot analyze the variation in the size of the effects depending on the pre-treatment income levels. As an alternative approach, I predict household income based on individual and household covariates (mother's and father's age and education, urban/rural area, and region fixed effects) using a model estimated on pre-treatment data (see details in Appendix B). I then split the sample into tertiles of predicted income. I find strong negative medium-term effects on household earnings for households in the lowest income tertile and zero effects in the top tertile. Despite these negative earnings effects, I find significant effects of the unconditional cash transfer on poverty. The introduction of the transfer reduced extreme and relative poverty by one third, and these effects remained equally large in both the short and medium run (Table A.10).

The program seems to have considerable spillover effects on the adult children in the treated households (Table 4). First, the program led to a significant increase in the presence of children aged 18-24 years in the household, indicating a possible postponement of the decision to leave. No such effects were found for fertility or the presence of grandparents (see Table

A.13). Second, I find a significant reduction in adult children’s total earnings in households with at least one adult child. Finally, I detect a 10 percent rise in the probability of these adult children being enrolled in education. Taken together, these results suggest that the program likely reduced the necessity for adult children to participate in the labor market, and that households invested in their children’s education.

The positive impact on the presence of adult children may, in part, stem from the incentives associated with the means-tested benefit, as increasing the number of children under the age of 25 in the household reduces the per capita measure used to verify eligibility for the transfer. Table C.1 shows that among treated households, the simulated probability of receiving the means-tested transfer increases from 24 percent for households with no adult children to 43 percent for households with one adult child. In the control group, this simulated probability increases from 17 percent to 24 percent. Consequently, the influence of the means-tested transfer on the obtained results is most pronounced for households with adult children. The positive effects on educational attainment combine both income effects and the effects of the reduced opportunity cost of education. In Appendix C, I show that the negative earnings effects for households with no adult children are smaller than for the whole sample, as dollar-for-dollar responses are equal to approximately -0.16.

I carry out a series of additional checks to verify the robustness of the estimated effects. Theoretically, labor supply responses to unconditional cash transfers may be nonlinear if households face fixed adjustment costs. Since the size of the shock depends on the number of children in each household, I compare the control group to households with three or more children. I find that the size of the shock is more than twice as large as in the baseline and the negative medium-term effects on earnings are twice as strong as in the baseline and statistically significant (Table A.11). Hence, the dollar-for-dollar effects are slightly smaller for the larger shock. As the effects of this larger shock are relatively more precise, I can reject large propensities in the range of those obtained by Golosov et al. (2024) for the U.S. lottery winners. However, it is worth to note that the convergence to the new earnings equilibrium seems slower compared to the smaller baseline shock, as the negative effects continue to increase four years after the introduction of the program (Figure A.5).

The estimates could be downward biased if the households were unable to adjust their labor supply before they received the benefits. The first parents received the benefit in April 2016 (four months after the passage of the child benefit bill), and the program achieved its maximum coverage in September 2016. I estimate the effects for these alternative definitions of the start of the treatment period, and find that the results are unaffected. The results remain stable after households who own a farm were added. Small earnings effects for single parents may reflect their low flexibility in labor supply choices.

Taken together, presented evidence suggests a high degree of heterogeneity of earnings responses. Groups with low earnings potential and low levels of labor market attachment significantly reduce their labor supply in the medium run. Households with highly educated parents and households living in urban areas do not adjust their labor supply. Hence, my baseline estimate of 25 dollar-for-dollar reduction in earnings should be interpreted as the average effect in the sample: it is the population average rather than a uniform effect across the distribution.

Effects on Consumption and Savings

The introduction of the child benefit increased households' consumption by nearly five percent. I exploit the detailed information on spending by category to shed light on the purposes of the additional spending. I divide consumption spending into three broad categories: investment, recreation, and harmful spending. The investment category includes investments in human capital (health, healthy food, education) and home production equipment (e.g., dishwashers, refrigerators). The recreation category includes spending on tourism, recreation equipment (e.g., TV sets, audio systems, consoles), and culture (e.g., cultural and sports events). The harmful spending category includes spending on foods and beverages with the lowest nutritional score (energy-dense, nutrient-poor foods), as well as on alcohol and cigarettes.

The introduction of the child benefit had a substantial positive impact on investment spending (Figure 5). The six percent increase in spending on healthy food, health, and education will likely have positive effects on children's health and earnings, as suggested by Aizer, Hoynes, and Lleras-Muney (2022). The positive effects on health and education expenditure should be interpreted as a lower bound for the effects in other countries, considering that in Poland, large shares of healthcare and education services are provided by the government at no direct

cost to the individual. The purchases of new home appliances may increase the effectiveness of home production. Interestingly, the effects on investments in home production equipment were confined to the initial two years of the program (Table A.14). In the subsequent two years households reallocated their resources towards other categories of investment spending. Recreation spending was increased by a similar amount. In addition to increasing the time they spent on leisure, the households decided to spend a considerable share of their additional income on improving the quality of their leisure. The households also increased their spending on goods and services that could be classified both as investment and recreation. This includes large increases in spending on clothing and transport. Finally, around one tenth of additional spending can be classified as harmful. The increase in the spending in this category was driven by a five percent increase in spending on products high in sugar. Importantly, the structure of additional consumption remains stable over time.

The treated households increased their savings by over 20 percent due to the introduction of the transfer. Figure A.6 shows that the households decided to place almost all of their additional savings in cash. I find very small and insignificant effects on loan repayments, purchases of tangible assets, or investments in deposits and stocks. These savings patterns may explain the lack of effects on capital income I find (Figure A.7).

5 Conclusion

In this paper, I investigated the impact of the introduction of a large unconditional cash transfer on the labor supply as well as on the consumption and savings patterns of households. I find zero short-term earnings effects and negative medium-term earnings effects, especially for households with low socioeconomic status. Households substantially increased their consumption and savings. The effects on savings are particularly striking, as households increased their cash savings by 20 percent.

Moreover, the estimated effects suggest that the program may have positive long-run effects on children's outcomes. First, a large share of the additional spending may be classified as investments in human capital and home production efficiency. Second, the program substantially reduced child poverty, and had positive spill-over effects on adult children's educational attendance.

During the preparation of this work the author used ChatGPT 3.5 in order to edit the text. After using this tool/service, the author reviewed and edited the content as needed and takes full responsibility for the content of the publication.

References

- Aizer, Anna, Shari Eli, Joseph Ferrie, and Adriana Lleras-Muney. 2016. “The Long-Run Impact of Cash Transfers to Poor Families.” *American Economic Review* 106 (4): 935–971.
- Aizer, Anna, Hilary Hoynes, and Adriana Lleras-Muney. 2022. “Children and the US Social Safety Net: Balancing Disincentives for Adults and Benefits for Children.” *Journal of Economic Perspectives* 36 (2): 149–74.
- Bailey, Martha J, Hilary Hoynes, Maya Rossin-Slater, and Reed Walker. 2024. “Is the Social Safety Net a Long-Term Investment? Large-Scale Evidence from the Food Stamps Program.” *Review of Economic Studies* 91 (3): 1291–1330.
- Banerjee, Abhijit, Paul Niehaus, and Tavneet Suri. 2019. “Universal Basic Income in the Developing World.” *Annual Review of Economics* 11:959–983.
- Barr, Andrew, Jonathan Eggleston, and Alexander A Smith. 2022. “Investing in Infants: The Lasting Effects of Cash Transfers to New Families.” *The Quarterly Journal of Economics* 137 (4): 2539–2583.
- Bulman, George, Robert Fairlie, Sarena Goodman, and Adam Isen. 2021. “Parental Resources and College Attendance: Evidence from Lottery Wins.” *American Economic Review* 111 (4): 1201–1240.
- Cesarini, David, Erik Lindqvist, Matthew J Notowidigdo, and Robert Östling. 2017. “The Effect of Wealth on Individual and Household Labor Supply: Evidence from Swedish Lotteries.” *American Economic Review* 107 (12): 3917–46.
- Enriquez, Brandon, Damon Jones, and Ernie Tedeschi. 2023. “The Short-Term Labor Supply Response to the Expanded Child Tax Credit.” *AEA Papers and Proceedings* 113:401–405.
- Golosov, Mikhail, Michael Graber, Magne Mogstad, and David Novgorodsky. 2024. “How Americans Respond to Idiosyncratic and Exogenous Changes in Household Wealth and Unearned Income.” *The Quarterly Journal of Economics* 139 (2): 1321–1395.
- Hoynes, Hilary, and Jesse Rothstein. 2019. “Universal Basic Income in the United States and Advanced Countries.” *Annual Review of Economics* 11:929–958.
- Jones, Damon, and Ioana Marinescu. 2022. “The Labor Market Impacts of Universal and Permanent Cash Transfers: Evidence from the Alaska Permanent Fund.” *American Economic Journal: Economic Policy* 14 (2): 315–40.
- Jones, Lauren E, Kevin Milligan, and Mark Stable. 2019. “Child cash benefits and family expenditures: Evidence from the National Child Benefit.” *Canadian Journal of Economics* 52 (4): 1433–1463.

- Koebel, Kourtney, and Tammy Schirle. 2016. "The differential impact of universal child benefits on the labour supply of married and single mothers." *Canadian Public Policy* 42 (1): 49–64.
- Magda, Iga, Nicola Brandt, and Aneta Kielczewska. 2020. "The Effect of Child Benefit on Female Labor Supply." *IZA Journal of Labor Policy* 10 (1).
- Manoli, Day, and Nicholas Turner. 2018. "Cash-on-Hand and College Enrollment: Evidence from Population Tax Data and the Earned Income Tax Credit." *American Economic Journal: Economic Policy* 10 (2): 242–71.
- Milligan, Kevin, and Mark Stabile. 2009. "Child Benefits, Maternal Employment, and Children's Health: Evidence from Canadian Child Benefit Expansions." *American Economic Review* 99 (2): 128–132.
- Myck, Michał, and Kajetan Trzciński. 2019. "From Partial to Full Universality: The Family 500+ Programme in Poland and its Labor Supply Implications." *ifo DICE Report* 17 (03): 36–44.
- Pilkauskas, Natasha, Katherine Micheltore, Nicole Kovski, and H Luke Shaefer. 2022. "The Effects of Income on the Economic Wellbeing of Families with Low Incomes: Evidence from the 2021 Expanded Child Tax Credit." *NBER Working Paper*.
- Premik, Filip. 2022. "Evaluating Poland's Family 500+ Child Support Programme." *Gospodarka Narodowa. The Polish Journal of Economics* 310 (2): 1–19.
- Price, David J, and Jae Song. 2018. "The Long-term Effects of Cash Assistance." *Working Paper*.
- Salehi-Isfahani, Djavad, and Mohammad H Mostafavi-Dehzoeei. 2018. "Cash Transfers and Labor Supply: Evidence from a Large-scale Program in Iran." *Journal of Development Economics* 135:349–367.
- Schirle, Tammy. 2015. "The Effect of Universal Child Benefits on Labour Supply." *Canadian Journal of Economics* 48 (2): 438–463.
- US SSA. 2018a. *Social Security Programs Throughout the World: Asia and the Pacific, 2018*.
- . 2018b. *Social Security Programs Throughout the World: Europe, 2018*.
- . 2019. *Social Security Programs Throughout the World: The Americas, 2019*.
- Verho, Jouko, Kari Hämäläinen, and Ohto Kanninen. 2022. "Removing Welfare Traps: Employment Responses in the Finnish Basic Income Experiment." *American Economic Journal: Economic Policy* 14 (1): 501–22.

Figures

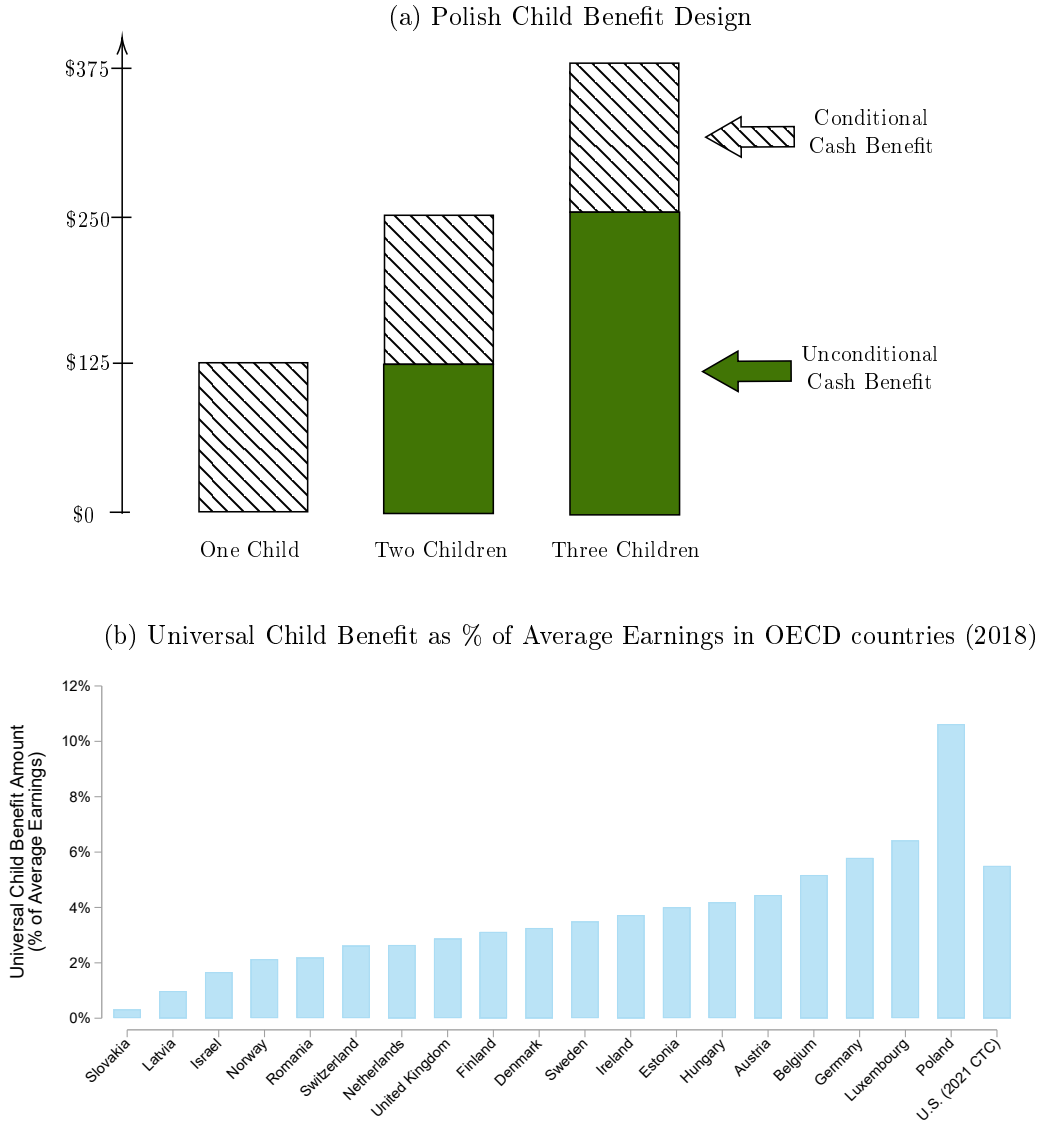


Figure 1: Universal Child Benefits in Poland and Other Countries

Notes: Figure 1a summarizes the design of the child benefit program in Poland. Parents receive a monthly cash benefit of 125 dollars for their second and each subsequent child (unconditional cash transfer). Additionally, they may receive a monthly cash benefit of 125 dollars for their first child if their income per household member does not exceed 215 dollars (conditional cash transfer). In the baseline specification, I compare the outcomes of households with two children (treatment group who receives the unconditional cash benefit) and households with one child (control group). Figure 1b shows the monthly amount of the universal child benefit divided by average gross monthly earnings in OECD countries as of 2018. In 19 OECD countries, there was a universal child benefit in 2018 (see US SSA (2018a, 2018b, 2019) for institutional details). The 2021 expanded U.S. Child Tax Credit is shown for a comparison. Average monthly earnings are provided by Eurostat (EU-SES), Israeli Central Bureau of Statistics, and the US Social Security Administration. See Figure A.1 for nominal values.

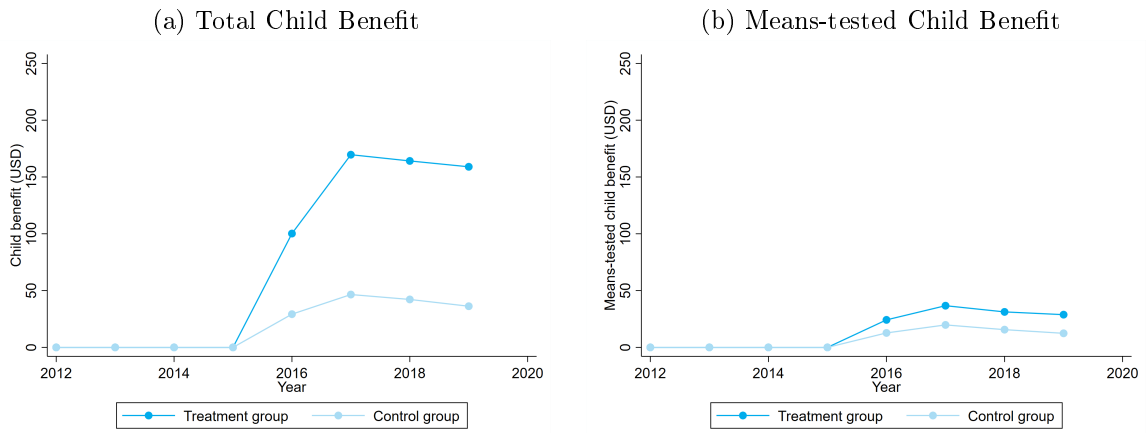


Figure 2: Child Benefit Amount

Notes: Figure 2a shows the average total child benefit amount for households with two children aged 3-17 (treatment group) and households with one child aged 3-17 (control group). Figure 2b shows the average amount of means-tested child benefit for households with two children aged 3-17 (treatment group) and households with one child aged 3-17 (control group). The sample includes households with two parents aged between 29 and 49 at the time of the introduction of the child benefit. I exclude households who own a farm. See Figure A.2 for the evolution of other outcome variables.

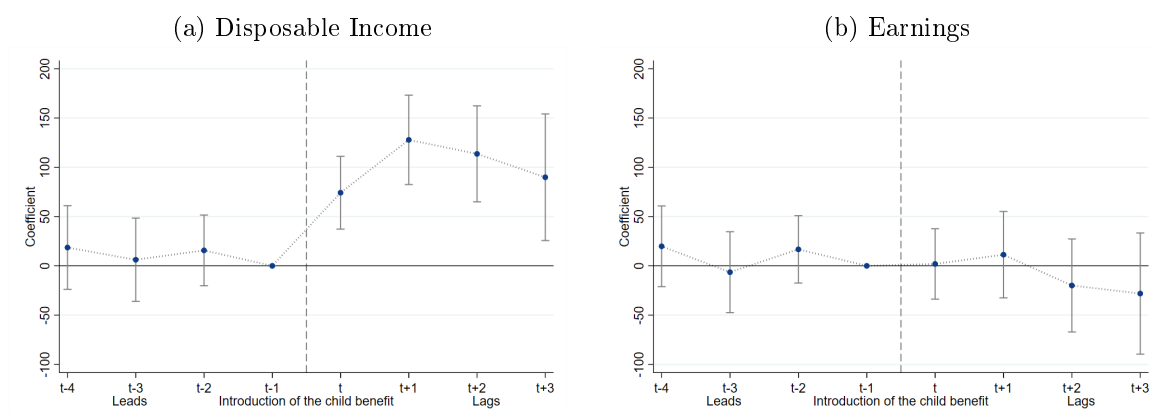


Figure 3: Effects on Income and Earnings

Notes: Figure shows the leads and lags of the effects of the introduction of the unconditional cash transfer on household disposable income and household earnings. Each data point represents the point estimate and the 95% confidence interval of the coefficient on interaction of the treatment group dummy and year. I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household. See Figure A.3 for the event study graphs for consumption, savings, and employment.

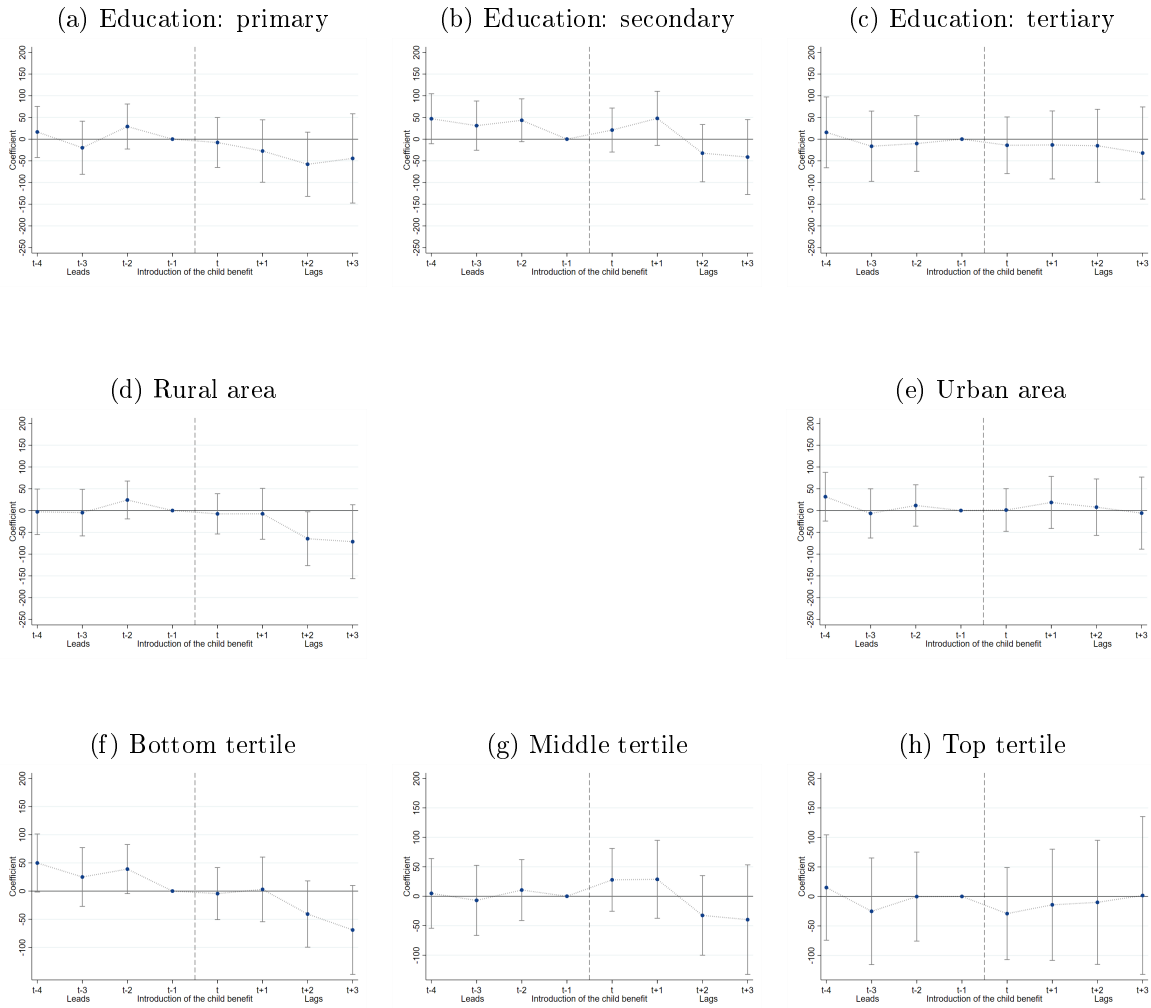
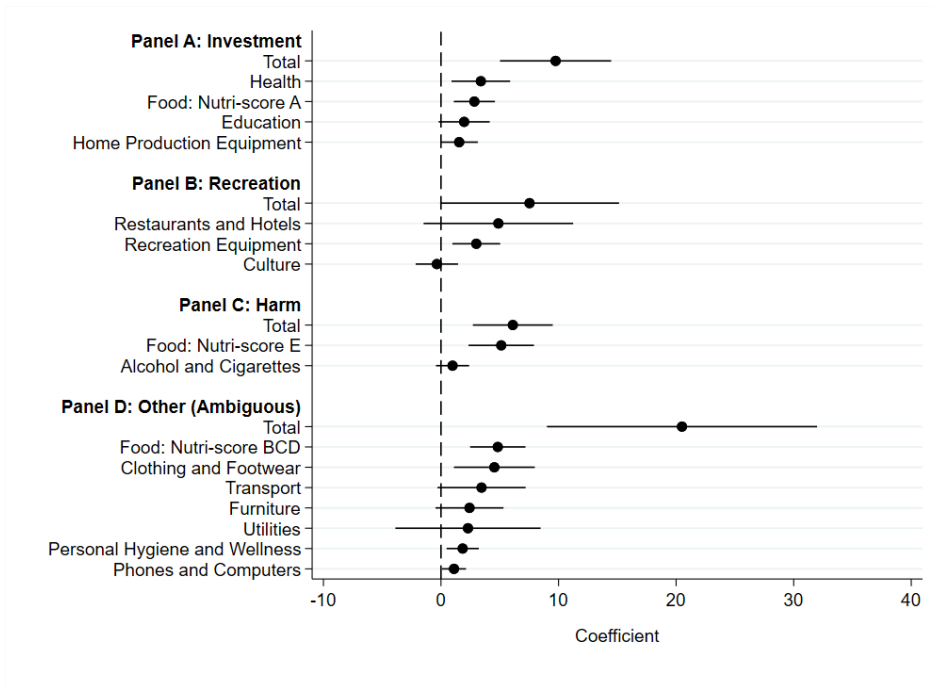


Figure 4: Event-study Effects on Household Earnings: Heterogeneity

Notes: Figure shows the leads and lags of the effects of the introduction of the unconditional cash transfer on household disposable income and household earnings for subgroups defined by mother's education, type of area of living, and predicted income tertiles. Income is predicted based on individual and household covariates (mother's and father's age and education, urban/rural area, and region fixed effects) using a model estimated on pre-treatment data. Each data point represents the point estimate and the 95% confidence interval of the coefficient on interaction of the treatment group dummy and year. The treatment group consists of households with two children aged 3-17. The control group consists of households with one child aged 3-17. I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household.

Figure 5: Spending Effects by Category



Notes: Figure shows the effects of the introduction of the unconditional child benefit on household spending divided into categories (point estimates and the 95% confidence intervals). I show the average effects over the entire post-treatment period. I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household. See Tables A.14-A.17 for the detailed regression results. The pre-treatment data starts in 2013 due to changes in the classification of goods and services.

Tables

Table 1: Effects of the Unconditional Cash Transfer

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Child benefit	Income	Earnings	Consumption	Savings	Employment	Full-time Employment	Earnings (unweighted)
Treatment Group \times Post-treatment Period (2016-2017)	95.665*** (1.949)	91.023*** (15.159)	-0.949 (14.762)	44.563*** (13.208)	46.460*** (13.123)	0.004 (0.007)	-0.004 (0.004)	1.084 (13.870)
Treatment Group \times Post-treatment Period (2018-2019)	120.104*** (2.039)	95.722*** (19.662)	-30.232 (19.070)	39.029** (16.018)	56.693*** (17.939)	-0.010 (0.008)	-0.005 (0.004)	-35.056** (17.883)
Demographic characteristics	yes	yes	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes	yes	yes
Region FE	yes	yes	yes	yes	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes	yes	yes	yes	yes
Adj. R-Squared	0.53	0.28	0.30	0.18	0.08	0.13	0.03	0.30
Mean of outcome	0.00	1221.05	1063.51	995.40	225.65	0.77	0.95	1046.40
Observations	44489	44489	44489	44489	44489	88978	69093	44489

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on six outcomes. Columns 1-4 show the results for household-level outcomes. Columns 5-6 show the results for parents' individual-level outcomes. In columns 1-6, I use sample weights. Column 7 shows the effects on household earnings without sample weights. The treatment group consists of households with two children aged 3-17. The control group consists of households with one child aged 3-17. The pre-treatment period includes observations from the 2012-2015 period, and the post-treatment period includes observations from the 2016-2018 period. The sample includes households with two parents aged between 29 and 49 at the time of the introduction of the child benefit. I exclude households who own a farm. The demographic characteristics include mother's and father's age and educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodeships). The standard errors are clustered at the level of the household. Mean of outcome is the mean of a given outcome in the treated group in the pre-treatment period. See Figures 3 and A.3 for event-study graphs. See Tables A.3-A.8 for detailed regression results with varying sets of control variables.

* $p < .10$; ** $p < .05$; *** $p < .01$

Table 2: Effects on Parental Labor Supply by Gender

	Mothers			Fathers		
	Earnings (1)	Employment (2)	Full-time Employment (3)	Earnings (4)	Employment (5)	Full-time Employment (6)
Treatment Group × Post-treatment Period (2016-2017)	2.294 (8.646)	-0.000 (0.011)	-0.005 (0.008)	4.653 (11.650)	0.013* (0.007)	-0.002 (0.004)
Treatment Group × Post-treatment Period (2018-2019)	-17.220 (10.905)	-0.028** (0.013)	-0.014 (0.009)	-3.638 (14.295)	0.010 (0.009)	0.004 (0.004)
Demographic characteristics	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes
Region FE	yes	yes	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes	yes	yes
Adj. R-Squared	0.24	0.10	0.02	0.17	0.02	0.01
Mean of outcome	341.56	0.63	0.91	695.97	0.91	0.97
Observations	44489	44489	29074	44489	44489	40019

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on individual monthly earnings, as well as the probability of employment, and full-time employment for mothers (columns 1-3) and fathers (columns 4-6). The demographic characteristics include age and educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodeships). The standard errors are clustered at the level of the household. Mean of outcome is the mean of a given outcome in the treated group in the pre-treatment period. See Figure A.4 for event-study graphs.

* p<.10; ** p<.05; *** p<.01

Table 3: Effects on Earnings: Decomposition and Heterogeneity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Employee earnings	Self-employment earnings	Education: Primary	Education: Secondary	Education: Tertiary	Rural areas	Urban areas	Predicted income: Bottom tertile	Predicted income: Middle tertile	Predicted income: Top tertile
Treatment Group	-19.399	18.450	-23.631	3.794	-10.813	-11.978	0.524	-28.718	26.098	-19.356
× Post-treatment Period (2016-2017)	(15.838)	(11.634)	(23.951)	(21.102)	(26.967)	(19.867)	(20.033)	(19.353)	(22.304)	(31.476)
Treatment Group	-43.735**	13.503	-59.528*	-65.565**	-18.013	-71.311***	-6.257	-78.123***	-37.109	-3.951
× Post-treatment Period (2018-2019)	(19.802)	(14.887)	(30.817)	(26.674)	(33.821)	(25.690)	(25.917)	(23.712)	(28.009)	(42.128)
Demographic characteristics	yes	yes	yes	yes	yes	no	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Region FE	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Adj. R-Squared	0.19	0.04	0.09	0.11	0.17	0.26	0.29	0.09	0.10	0.14
Mean of outcome	893.11	170.39	692.07	925.99	1479.49	901.46	1164.91	708.77	936.41	1516.58
Mean of child benefit (2016-2017)	97.00	97.00	118.71	97.48	84.00	98.45	94.47	110.22	96.74	84.04
Mean of child benefit (2018-2019)	122.10	122.10	153.77	128.33	105.25	128.42	117.23	141.33	118.70	107.35
Observations	44489	44489	10345	15700	18444	19966	24523	14834	14829	14826

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit. Column 1 shows the effects on total household employee earnings. Column 2 shows the effects on total household self-employment earnings. Columns 3-10 show the effects on total household earnings (sum of employee and self-employment earnings) depending on mother's earnings, type of area of living and predicted income tertile. Income is predicted based on individual and household covariates (mother's and father's age and education, urban/rural area, and region fixed effects) using a model estimated on pre-treatment data.

* p<.10; ** p<.05; *** p<.01

Table 4: Effects on Adult Children

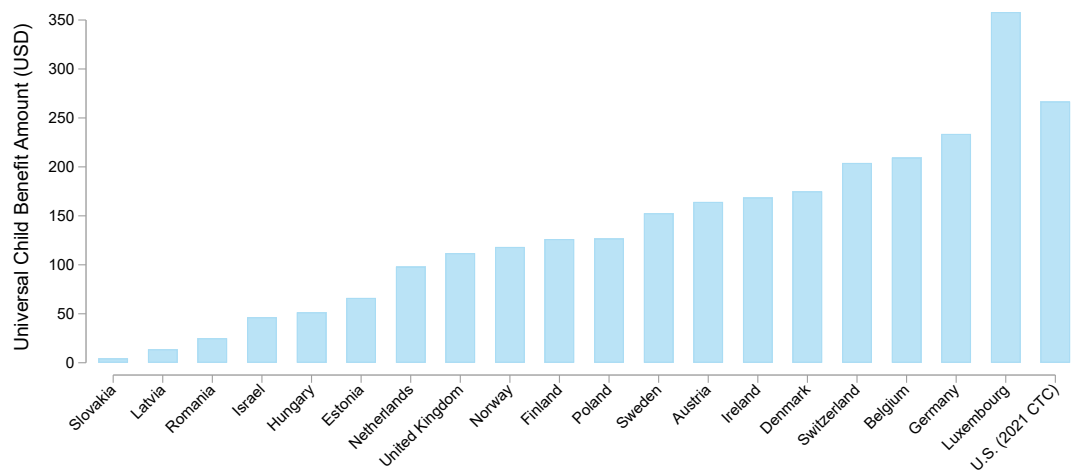
	(1)	(2)	(3)
	Household members	Earnings	Education
Treatment Group \times Post-treatment Period (2016-2017)	0.036*** (0.008)	-26.821** (13.086)	0.052* (0.028)
Treatment Group \times Post-treatment Period (2018-2019)	0.022** (0.010)	-26.232* (15.530)	0.075** (0.030)
Demographic characteristics	yes	yes	yes
Year FE	yes	yes	yes
Region FE	yes	yes	yes
Regional unemployment rate	yes	yes	yes
Adj. R-Squared	0.25	0.06	0.07
Mean of outcome	0.10	68.99	0.74
Observations	44489	6546	6546

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on outcomes of adult children aged 18-24 years old. Column 1 shows the effects on the probability of having at least one adult child living in the household. Columns 2 and 3 show the effects on total earnings and educational enrollment of adult children, respectively. In columns 2 and 3, I restrict the sample to households with at least one adult child.

* $p < .10$; ** $p < .05$; *** $p < .01$

Appendix A Additional Figures and Tables

Figure A.1: Universal Child Benefits in OECD Countries (USD)



Notes: Figure shows the monthly amount of the universal child benefit in US dollars. In 19 OECD countries, there was a universal child benefit in 2018 (see US SSA (2018a, 2018b, 2019) for institutional details). The 2021 expanded U.S. Child Tax Credit is shown for a comparison.

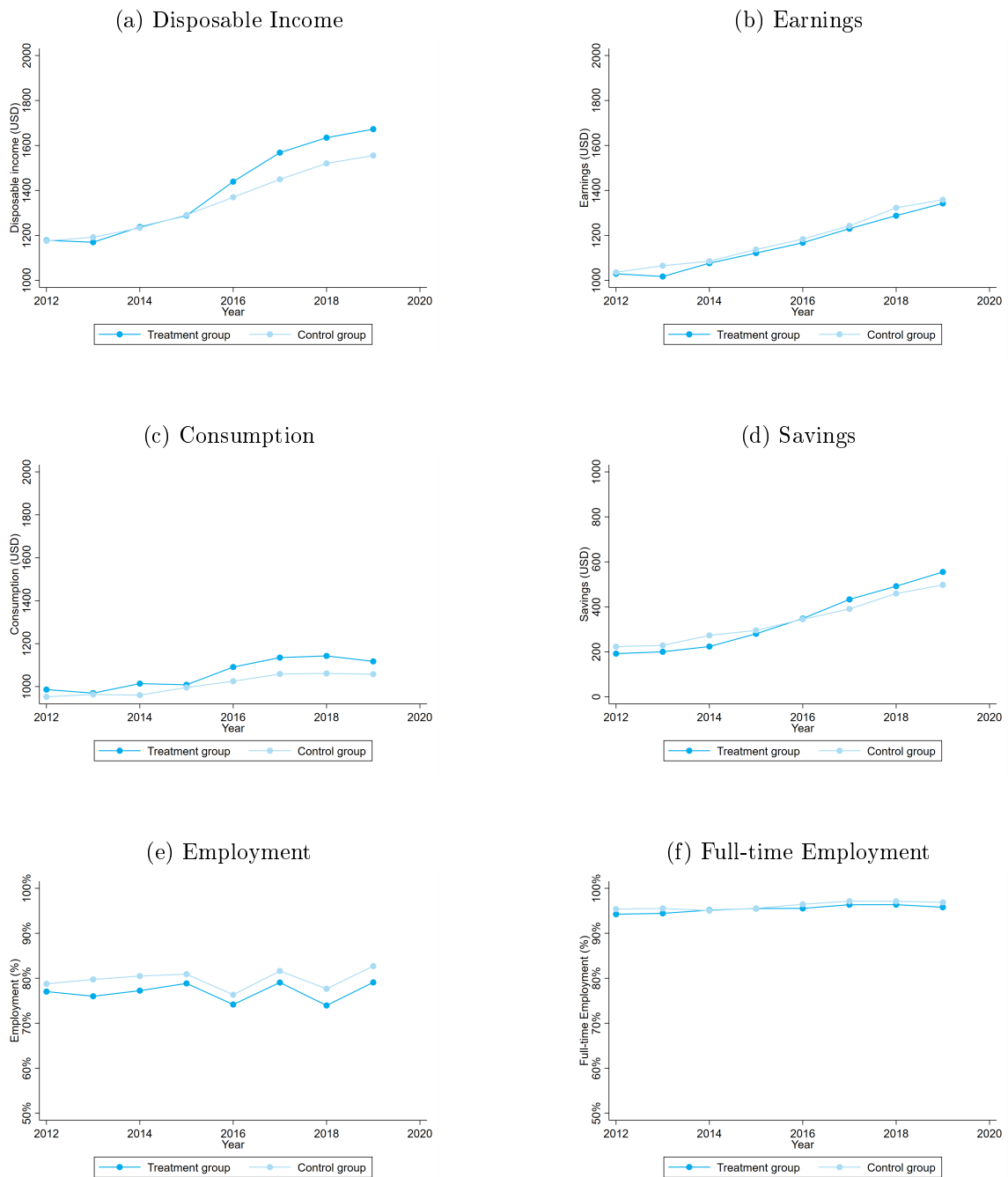


Figure A.2: The Evolution of Selected Characteristics Over Time

Notes: Figure shows the average values of selected characteristics in the treatment and control groups. The treatment group consists of households with three children aged 3-17. The control group consists of households with two children aged 3-17.

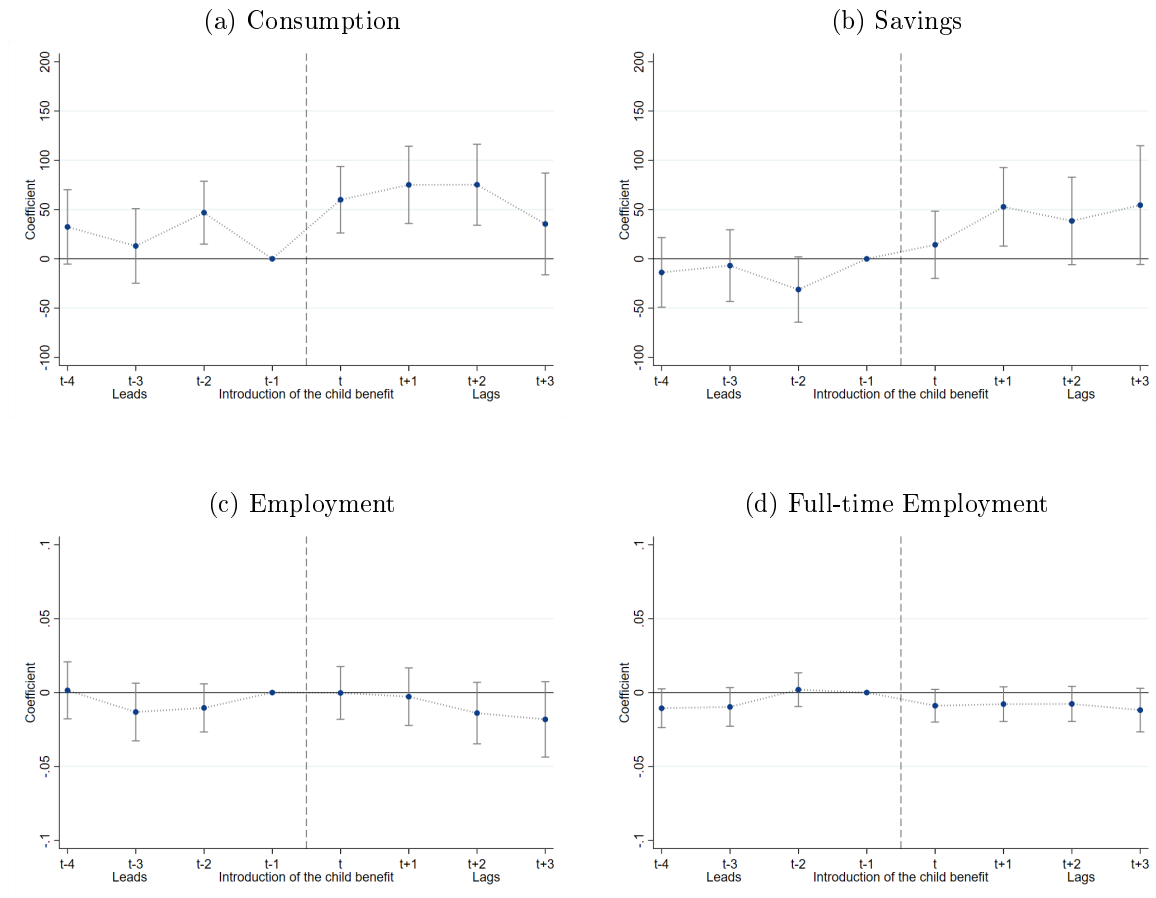


Figure A.3: Effects on Consumption, Savings, and Employment

Notes: Figure shows the leads and lags of the effects of the introduction of the unconditional cash transfer on various outcome variables. Each data point represents the point estimate and the 95% confidence interval of the coefficient on interaction of the treatment group dummy and year. The treatment group consists of households with two children aged 3-17. The control group consists of households with one child aged 3-17. I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household.

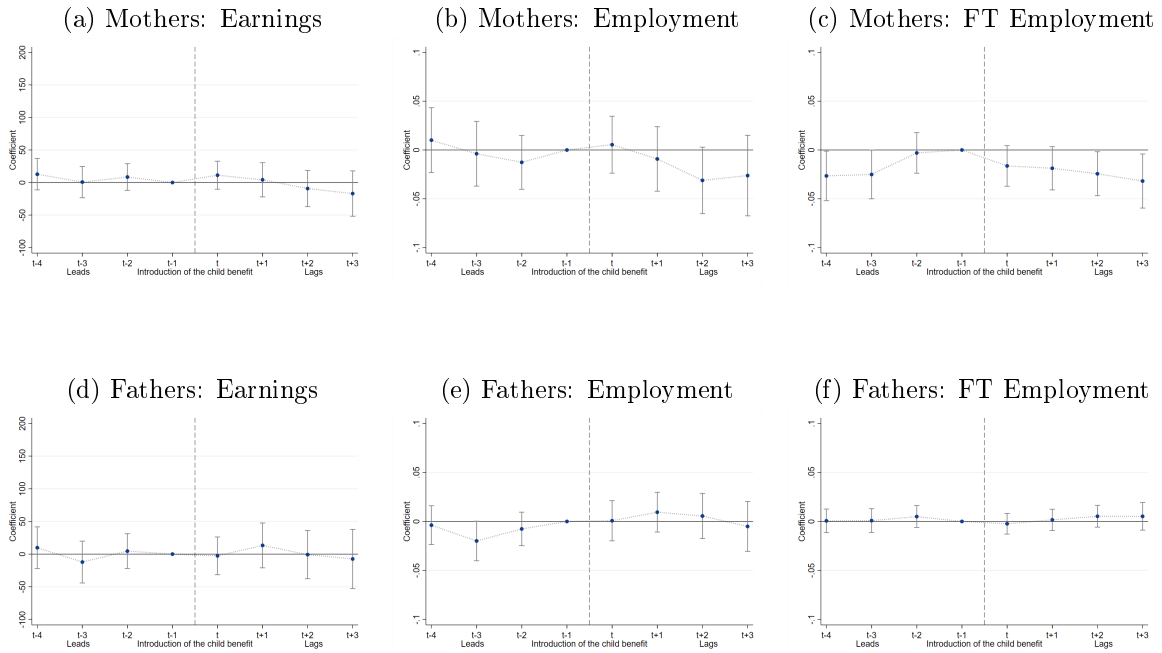


Figure A.4: Event-study Effects on Parental Labor Supply by Gender

Notes: Figure shows the leads and lags of the effects of the introduction of the unconditional cash transfer on the following individual outcomes of mothers and fathers: earnings, employment, and full-time employment. Each data point represents the point estimate and the 95% confidence interval of the coefficient on interaction of the treatment group dummy and year. The treatment group consists of households with two children aged 3-17. The control group consists of households with one child aged 3-17. I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household.

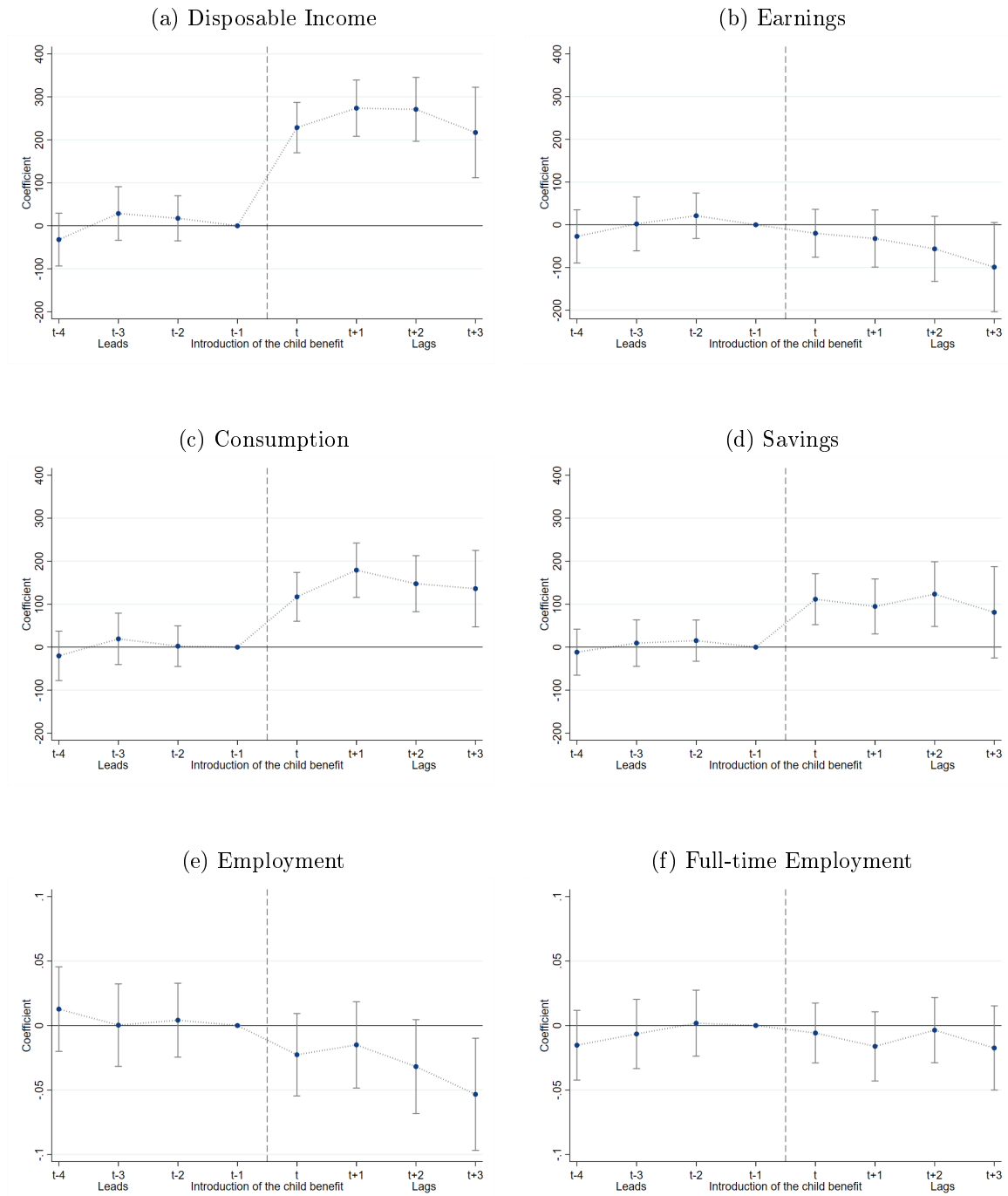
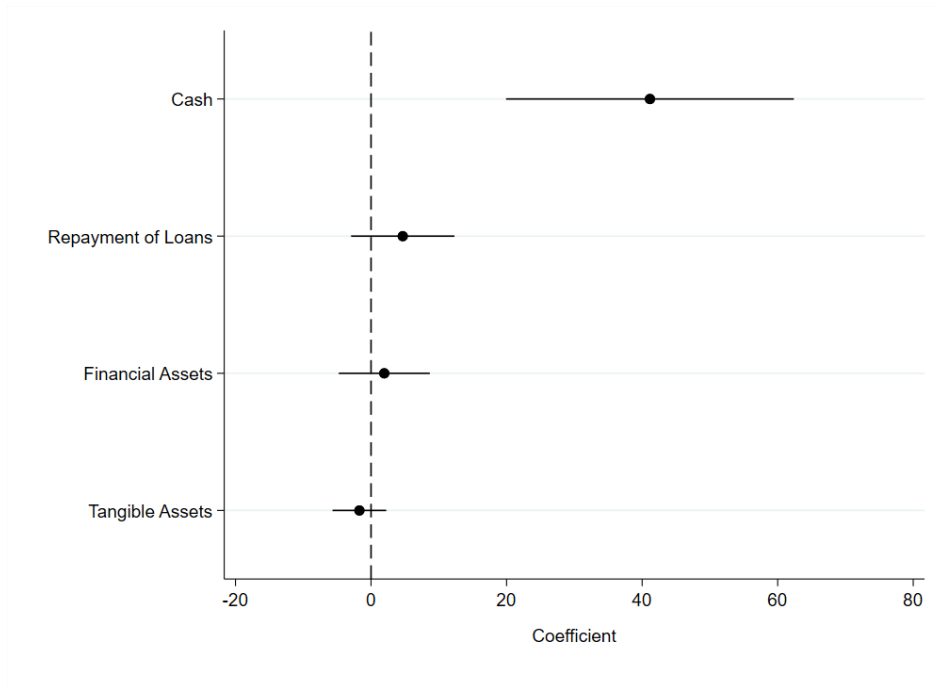


Figure A.5: Event-study Effects: Households with Three or More Children

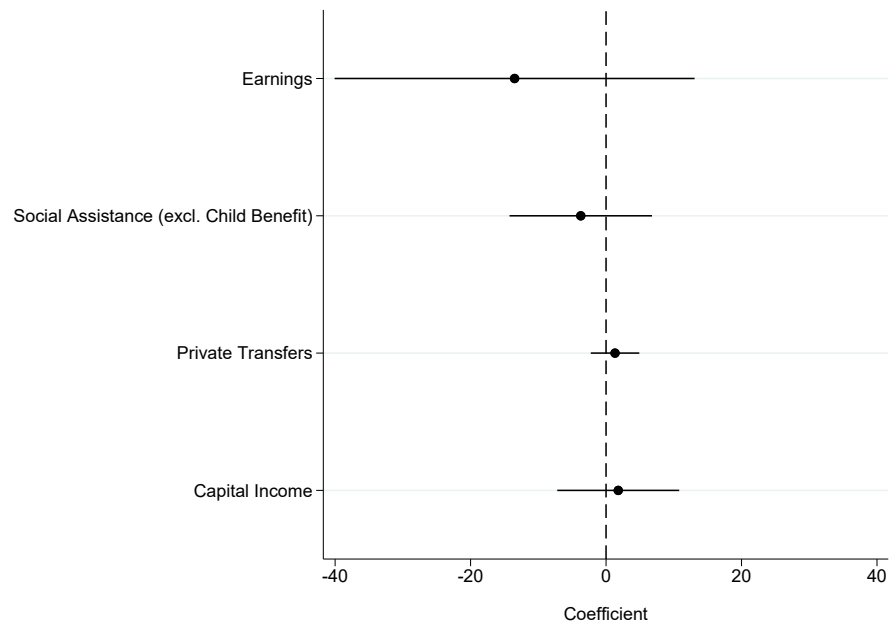
Notes: Figure shows the leads and lags of the effects of the introduction of the unconditional cash transfer on various outcome variables. Each data point represents the point estimate and the 95% confidence interval of the coefficient on interaction of the treatment group dummy and year. The treatment group consists of households with three or more children aged 3-17. The control group consists of households with one child aged 3-17. I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household.

Figure A.6: Effects on Savings



Notes: Figure shows the effects of the introduction of the unconditional child benefit on household savings expenditure divided into categories (point estimates and the 95% confidence intervals). I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household. Data: Household Budget Survey

Figure A.7: Effects on Income from Sources Other than the Child Benefit



Notes: Figure shows the effects of the introduction of the unconditional child benefit on household income divided into categories (point estimates and the 95% confidence intervals). I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NU TS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household.

Table A.1: Summary Statistics

	Obs.	Mean	Std. Dev.	Min.	Max.
DID Variables					
Treatment group	44489	0.48	0.50	0.00	1.00
Post-treatment (2016-2017)	44489	0.27	0.45	0.00	1.00
Post-treatment (2018-2019)	44489	0.21	0.40	0.00	1.00
Dependent Variables					
Disposable Income	44489	1362.04	702.30	0.00	7423.63
Earnings	44489	1160.47	695.95	0.00	7242.65
Consumption	44489	1031.21	576.03	71.54	4572.78
Savings	44489	330.83	564.03	-4449.44	6227.96
Employment	88978	0.78	0.41	0.00	1.00
Full-time Employment	69093	0.96	0.20	0.00	1.00
Control Variables					
Age: Mother	44489	36.97	5.06	18.00	58.00
Age: Father	44489	38.90	5.25	19.00	67.00
Primary Education: Mother (ref. level)	44489	0.22	0.41	0.00	1.00
Primary Education: Father (ref. level)	44489	0.37	0.48	0.00	1.00
Secondary Education: Mother	44489	0.35	0.48	0.00	1.00
Secondary Education: Father	44489	0.34	0.47	0.00	1.00
Tertiary Education: Mother	44489	0.43	0.50	0.00	1.00
Tertiary Education: Father	44489	0.29	0.45	0.00	1.00
Small Town	44489	0.35	0.48	0.00	1.00
Large Town	44489	0.31	0.46	0.00	1.00

Notes: Table reports the summary statistics (number of observations, mean, standard deviation, minimum, maximum) of the DID, dependent and control variables.

Table A.2: Balance Table: Pre-treatment vs Post-treatment

	Households with one child			Households with two children		
	Pre-treatment (mean)	Post-treatment (mean, 2016-2017)	Post-treatment (mean, 2018-2019)	Pre-treatment (mean)	Post-treatment (mean, 2016-2017)	Post-treatment (mean, 2018-2019)
DID Variables						
Treatment group	0.00	0.00	0.00	1.00	1.00	1.00
Post-treatment (2016-2017)	0.00	1.00	0.00	0.00	1.00	0.00
Post-treatment (2018-2019)	0.00	0.00	1.00	0.00	0.00	1.00
Dependent Variables						
Disposable Income	1223.59	1409.57	1531.58	1221.05	1503.48	1647.44
Earnings	1081.39	1213.01	1334.18	1063.51	1198.63	1306.32
Consumption	968.26	1041.87	1060.06	995.40	1113.04	1134.27
Savings	255.33	367.70	471.52	225.65	390.44	513.17
Control Variables						
Age: Mother	35.46	37.80	39.44	36.13	37.67	38.49
Age: Father	37.37	39.57	41.26	38.12	39.72	40.44
Primary Education: Mother (ref. level)	0.22	0.18	0.18	0.27	0.23	0.19
Primary Education: Father (ref. level)	0.38	0.34	0.31	0.44	0.38	0.33
Secondary Education: Mother	0.35	0.33	0.33	0.37	0.34	0.33
Secondary Education: Father	0.34	0.36	0.36	0.32	0.32	0.33
Tertiary Education: Mother	0.43	0.48	0.49	0.36	0.43	0.48
Tertiary Education: Father	0.28	0.30	0.32	0.24	0.30	0.34
Small Town	0.37	0.35	0.35	0.34	0.33	0.33
Large Town	0.34	0.35	0.36	0.28	0.29	0.28
Observations	12927	6151	4226	11170	5843	4172

Notes: Table reports average values of the DID, dependent and control variables in the treatment group (households with two children aged 3-17) and control group (households with one child aged 3-17), in the pre-treatment (2012-2015) and the post-treatment period (2016-2018).

Table A.3: Effects on Disposable Income

	(1)	(2)	(3)	(4)	(5)	(6)
Treatment Group × Post-treatment Period (2016-2017)	96.451*** (17.300)	86.874*** (15.342)	87.632*** (15.333)	91.382*** (15.172)	91.023*** (15.159)	87.270*** (15.224)
Treatment Group × Post-treatment Period (2018-2019)	118.407*** (21.881)	97.363*** (19.841)	97.289*** (19.838)	95.152*** (19.663)	95.722*** (19.662)	90.601*** (19.791)
Demographic 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
Demographic characteristics x Post-treatment Period	no	no	no	no	no	yes
Region FE x Post-treatment Period	no	no	no	no	no	yes
Regional unemployment rate x Post-treatment Period	no	no	no	no	no	yes
Adj. R-Squared	0.05	0.26	0.26	0.27	0.28	0.28
Mean of outcome	1221.05	1221.05	1221.05	1221.05	1221.05	1221.05
Mean of child benefit (2016-2017)	97.00	97.00	97.00	97.00	97.00	97.00
Mean of child benefit (2018-2019)	122.10	122.10	122.10	122.10	122.10	122.10
Observations	44489	44489	44489	44489	44489	44489

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on household disposable income. The demographic characteristics include mother's and father's age and educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodeships). Column 5 shows the baseline specification. In column 6, I additionally control for the interaction of all control variables with the post-treatment dummy. The standard errors are clustered at the level of the household. Mean of outcome is the mean of household disposable income in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group.

* p<.10; ** p<.05; *** p<.01

Table A.4: Effects on Earnings

	(1)	(2)	(3)	(4)	(5)	(6)
Treatment Group × Post-treatment Period (2016-2017)	3.516 (17.548)	-4.489 (15.019)	-4.116 (15.024)	-0.697 (14.763)	-0.949 (14.762)	-0.223 (14.888)
Treatment Group × Post-treatment Period (2018-2019)	-9.971 (22.013)	-27.480 (19.344)	-27.799 (19.350)	-30.632 (19.072)	-30.232 (19.070)	-30.881 (19.209)
Demographic 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
Demographic characteristics x Post-treatment Period	no	no	no	no	no	yes
Region FE x Post-treatment Period	no	no	no	no	no	yes
Regional unemployment rate x Post-treatment Period	no	no	no	no	no	yes
Adj. R-Squared	0.02	0.27	0.27	0.30	0.30	0.30
Mean of outcome	1063.51	1063.51	1063.51	1063.51	1063.51	1063.51
Mean of child benefit (2016-2017)	97.00	97.00	97.00	97.00	97.00	97.00
Mean of child benefit (2018-2019)	122.10	122.10	122.10	122.10	122.10	122.10
Observations	44489	44489	44489	44489	44489	44489

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on total household earnings. The demographic characteristics include mother's and father's age and educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodeships). Column 5 shows the baseline specification. In column 6, I additionally control for the interaction of all control variables with the post-treatment dummy. The standard errors are clustered at the level of the household. Mean of outcome is the mean of total household earnings in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group.

* p<.10; ** p<.05; *** p<.01

Table A.5: Effects on Consumption

	(1)	(2)	(3)	(4)	(5)	(6)
Treatment Group \times Post-treatment Period (2016-2017)	44.028*** (14.453)	40.370*** (13.390)	40.389*** (13.391)	45.091*** (13.230)	44.563*** (13.208)	43.513*** (13.282)
Treatment Group \times Post-treatment Period (2018-2019)	47.071*** (17.430)	37.674** (16.228)	38.211** (16.228)	38.190** (16.023)	39.029** (16.018)	36.827** (16.147)
Demographic 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
Demographic characteristics \times Post-treatment Period	no	no	no	no	no	yes
Region FE \times Post-treatment Period	no	no	no	no	no	yes
Regional unemployment rate \times Post-treatment Period	no	no	no	no	no	yes
Adj. R-Squared	0.01	0.16	0.16	0.17	0.18	0.18
Mean of outcome	995.40	995.40	995.40	995.40	995.40	995.40
Mean of child benefit (2016-2017)	97.00	97.00	97.00	97.00	97.00	97.00
Mean of child benefit (2018-2019)	122.10	122.10	122.10	122.10	122.10	122.10
Observations	44489	44489	44489	44489	44489	44489

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on total household consumption expenditure. The demographic characteristics include mother's and father's age and educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodeships). Column 5 shows the baseline specification. In column 6, I additionally control for the interaction of all control variables with the post-treatment dummy. The standard errors are clustered at the level of the household. Mean of outcome is the mean of total household consumption expenditure in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group.

* $p < .10$; ** $p < .05$; *** $p < .01$

Table A.6: Effects on Savings

	(1)	(2)	(3)	(4)	(5)	(6)
Treatment Group \times Post-treatment Period (2016-2017)	52.423*** (13.440)	46.504*** (13.184)	47.243*** (13.181)	46.291*** (13.122)	46.460*** (13.123)	43.757*** (13.215)
Treatment Group \times Post-treatment Period (2018-2019)	71.337*** (18.246)	59.689*** (18.035)	59.079*** (18.027)	56.962*** (17.942)	56.693*** (17.939)	53.774*** (18.008)
Demographic 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
Demographic characteristics \times Post-treatment Period	no	no	no	no	no	yes
Region FE \times Post-treatment Period	no	no	no	no	no	yes
Regional unemployment rate \times Post-treatment Period	no	no	no	no	no	yes
Adj. R-Squared	0.03	0.07	0.07	0.08	0.08	0.08
Mean of outcome	225.65	225.65	225.65	225.65	225.65	225.65
Mean of child benefit (2016-2017)	97.00	97.00	97.00	97.00	97.00	97.00
Mean of child benefit (2018-2019)	122.10	122.10	122.10	122.10	122.10	122.10
Observations	44489	44489	44489	44489	44489	44489

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on total household savings. The demographic characteristics include mother's and father's age and educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodeships). Column 5 shows the baseline specification. In column 6, I additionally control for the interaction of all control variables with the post-treatment dummy. The standard errors are clustered at the level of the household. Mean of outcome is the mean of total household savings in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group.

* $p < .10$; ** $p < .05$; *** $p < .01$

Table A.7: Effects on Employment

	(1)	(2)	(3)	(4)	(5)	(6)
Treatment Group \times Post-treatment Period (2016-2017)	0.003 (0.007)	0.003 (0.007)	0.003 (0.007)	0.004 (0.007)	0.004 (0.007)	0.008 (0.007)
Treatment Group \times Post-treatment Period (2018-2019)	-0.009 (0.008)	-0.009 (0.008)	-0.010 (0.008)	-0.010 (0.008)	-0.010 (0.008)	-0.002 (0.008)
Demographic 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
Demographic characteristics \times Post-treatment Period	no	no	no	no	no	yes
Region FE \times Post-treatment Period	no	no	no	no	no	yes
Regional unemployment rate \times Post-treatment Period	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.13	0.13	0.13	0.13	0.04
Mean of outcome	0.77	0.77	0.77	0.77	0.77	0.77
Mean of child benefit (2016-2017)	97.00	97.00	97.00	97.00	97.00	97.00
Mean of child benefit (2018-2019)	122.10	122.10	122.10	122.10	122.10	122.10
Observations	88978	88978	88978	88978	88978	88978

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on the probability of employment of mothers and fathers. The demographic characteristics include age, educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodeships). Column 5 shows the baseline specification. In column 6, I additionally control for the interaction of all control variables with the post-treatment dummy. The standard errors are clustered at the level of the household. Mean of outcome is the mean of the employment binary variable in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group.

* $p < .10$; ** $p < .05$; *** $p < .01$

Table A.8: Effects on Full-Time Employment

	(1)	(2)	(3)	(4)	(5)	(6)
Treatment Group × Post-treatment Period (2016-2017)	-0.003 (0.004)	-0.004 (0.004)	-0.004 (0.004)	-0.004 (0.004)	-0.004 (0.004)	-0.002 (0.004)
Treatment Group × Post-treatment Period (2018-2019)	-0.004 (0.004)	-0.005 (0.004)	-0.005 (0.004)	-0.005 (0.004)	-0.005 (0.004)	-0.001 (0.004)
Demographic 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
Demographic characteristics x Post-treatment Period	no	no	no	no	no	yes
Region FE x Post-treatment Period	no	no	no	no	no	yes
Regional unemployment rate x Post-treatment Period	no	no	no	no	no	yes
Adj. R-Squared	0.00	0.03	0.03	0.03	0.03	0.01
Mean of outcome	0.95	0.95	0.95	0.95	0.95	0.95
Mean of child benefit (2016-2017)	95.72	95.72	95.72	95.72	95.72	95.72
Mean of child benefit (2018-2019)	119.71	119.71	119.71	119.71	119.71	119.71
Observations	69093	69093	69093	69093	69093	69093

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on the probability of being in full-time employment for employed mothers and fathers. The demographic characteristics include age and educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodeships). Column 5 shows the baseline specification. In column 6, I additionally control for the interaction of all control variables with the post-treatment dummy. The standard errors are clustered at the level of the household. Mean of outcome is the mean of the full-time employment binary variable in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group.

* p<.10; ** p<.05; *** p<.01

Table A.9: Effects on Individual Earnings

	(1)	(2)	(3)	(4)
	Parents	Underage Children	Adult Children	Grandparents
Treatment Group × Post-treatment Period (2016-2017)	6.549 (14.452)	-0.139 (0.114)	-2.852 (2.075)	-3.839 (3.709)
Treatment Group × Post-treatment Period (2018-2019)	-22.573 (18.825)	-0.196* (0.116)	-4.269 (2.674)	0.289 (3.662)
Demographic characteristics	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
Region FE	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes
Adj. R-Squared	0.30	0.00	0.06	0.03
Mean of outcome	1037.53	0.24	6.64	13.96
Observations	44489	44489	44489	44489

Notes: Table shows the effects of the introduction of the unconditional child benefit on parental earnings, as well as the total earnings of underage children, adult children (non-parents aged 18-24 years old), and grandparents (non-parents aged over 40 years old). I control for demographic characteristics (age, education, and the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. See Table 2 for additional outcomes of mothers and fathers.

* p<.10; ** p<.05; *** p<.01

Table A.10: Effects on Poverty

	(1)	(2)
	Extreme poverty	Relative poverty
Treatment Group \times Post-treatment Period (2016-2017)	-0.013*** (0.003)	-0.036*** (0.005)
Treatment Group \times Post-treatment Period (2018-2019)	-0.013*** (0.004)	-0.036*** (0.006)
Demographic characteristics	yes	yes
Year FE	yes	yes
Region FE	yes	yes
Regional unemployment rate	yes	yes
Adj. R-Squared	0.02	0.05
Mean of outcome	0.03	0.09
Mean of child benefit (2016-2017)	97.00	97.00
Mean of child benefit (2018-2019)	122.10	122.10
Observations	44489	44489

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on the probability of a household living in poverty. In column 1, the dependent variable is extreme poverty (equivalized expenditures below the poverty line in Poland). In column 2, the dependent variable is relative poverty (equivalized expenditures below 50% of the national mean). Mean of outcome is the mean of a given outcome in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group.
* p<.10; ** p<.05; *** p<.01

Table A.11: Effects of the Unconditional Cash Transfer: Households with Three or More Children

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Child benefit	Income	Earnings	Consumption	Savings	Employment	Full-time Employment
Treatment Group \times Post-treatment Period (2016-2017)	241.979*** (4.907)	243.814*** (21.388)	-14.939 (21.366)	142.094*** (19.827)	101.720*** (20.098)	-0.019* (0.011)	-0.002 (0.008)
Treatment Group \times Post-treatment Period (2018-2019)	285.636*** (4.392)	243.480*** (28.321)	-60.323** (29.077)	126.324*** (24.488)	117.156*** (27.789)	-0.035*** (0.013)	-0.003 (0.009)
Demographic characteristics	yes	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes	yes
Region FE	yes	yes	yes	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes	yes	yes	yes
Adj. R-Squared	0.65	0.28	0.30	0.18	0.07	0.15	0.03
Mean of outcome	0.00	1079.61	849.21	936.54	143.07	0.67	0.93
Observations	28549	28549	28549	28549	28549	57098	43492

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on six outcomes. The treatment group consists of households with three or more children aged 3-17. The control group consists of households with one child aged 3-17. Mean of outcome is the mean of a given outcome in the treated group in the pre-treatment period. See Table 1 for the description of dependent and independent variables.
* p<.10; ** p<.05; *** p<.01

Table A.12: Effects of the Unconditional Cash Transfer: Robustness

	(1)	(2)	(3)	(4)	(5)
	Treatment start: April	Treatment start: September	Including farms	Single parents	est 5E
Treatment Group \times Post-treatment Period (2016-2017)	-0.113 (15.317)	3.010 (16.318)	-3.628 (14.639)	19.953 (24.535)	1.084 (13.870)
Treatment Group \times Post-treatment Period (2018-2019)	-29.935 (18.988)	-29.186 (18.871)	-37.176** (18.806)	-6.815 (32.226)	-35.056** (17.883)
Demographic characteristics	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes
Region FE	yes	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes	yes
Adj. R-Squared	0.30	0.30	0.31	0.20	0.30
Mean of outcome	1067.41	1077.79	1004.74	728.49	1046.40
Mean of child benefit (2016-2017)	110.27	122.10	97.89	110.57	92.38
Mean of child benefit (2018-2019)	122.10	122.10	123.12	139.27	119.13
Observations	44489	44489	47329	7784	44489

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on total household earnings. The treatment group consists of households with three or more children aged 3-17. Compared to the baseline specification, the following modifications were made. Column 1 sets the post-treatment period to start in April 2016. Column 2 sets the post-treatment period to start in September 2016. In column 3, households who own a farm are additionally included. Column 4 is restricted to households with single parents. Mean of outcome is the mean of total household earnings in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group. See Table 1 for the description of dependent and independent variables.

* $p < .10$; ** $p < .05$; *** $p < .01$

Table A.13: Effects on Household Composition

	(1)	(2)	(3)
	Fertility	Adult Children	Grandparents
Treatment Group \times Post-treatment Period (2016-2017)	0.008 (0.005)	0.036*** (0.008)	-0.004 (0.010)
Treatment Group \times Post-treatment Period (2018-2019)	0.009 (0.006)	0.022** (0.010)	-0.005 (0.011)
Demographic 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	0.25	0.08
Mean of outcome	0.03	0.10	0.15
Mean of child benefit (2016-2017)	97.00	97.00	97.00
Mean of child benefit (2018-2019)	122.10	122.10	122.10
Observations	44489	44489	44489

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on household composition. In column 1, the dependent variable that is equal to one for households with a child under one year old, and zero otherwise. In column 2, the dependent variable that is equal to one for households with at least one non-parent aged 18-24 years old, and zero otherwise. In column 3, the dependent variable that is equal to one for households with at least one non-parent aged 41 years old or older, and zero otherwise. The age brackets are selected based on the assumption that individuals can have a child when they are 16 years old or older. Mean of outcome is the mean of a given outcome in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group. See Table 1 for a description of the independent variables.

* $p < .10$; ** $p < .05$; *** $p < .01$

Table A.14: Consumption Effects: Investment

	(1)	(2)	(3)	(4)	(5)
	Total	Health	Food: Nutri-score A	Education	Home Production Equipment
Treatment Group × Post-treatment Period (2016-2017)	9.678*** (2.690)	2.851** (1.440)	2.555** (0.999)	1.671 (1.236)	2.602*** (0.919)
Treatment Group × Post-treatment Period (2018-2019)	9.845*** (3.294)	4.110** (1.772)	3.219*** (1.186)	2.372 (1.462)	0.144 (1.163)
Demographic characteristics	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes
Region FE	yes	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes	yes
Adj. R-Squared	0.15	0.06	0.10	0.12	0.01
Mean of outcome	151.22	38.22	81.69	22.26	9.05
Observations	38557	38557	38557	38557	38557

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on consumption spending divided into categories. Mean of outcome is average spending in a given category in the treated group in the pre-treatment period. See Table 1 for a description of the independent variables. The pre-treatment data starts in 2013 due to changes in the classification of goods and services.

* p<.10; ** p<.05; *** p<.01

Table A.15: Consumption Effects: Recreation

	(1)	(2)	(3)	(4)
	Total	Restaurants and Hotels	Recreation Equipment	Culture
Treatment Group × Post-treatment Period (2016-2017)	8.688* (4.537)	4.964 (3.865)	3.267*** (1.202)	0.457 (1.014)
Treatment Group × Post-treatment Period (2018-2019)	5.995 (4.977)	4.773 (4.092)	2.656** (1.344)	-1.433 (1.206)
Demographic characteristics	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
Region FE	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes
Adj. R-Squared	0.16	0.11	0.05	0.09
Mean of outcome	136.50	73.66	24.48	38.36
Observations	38557	38557	38557	38557

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on consumption spending divided into categories. Mean of outcome is average spending in a given category in the treated group in the pre-treatment period. See Table 1 for a description of the independent variables. The pre-treatment data starts in 2013 due to changes in the classification of goods and services.

* p<.10; ** p<.05; *** p<.01

Table A.16: Consumption Effects: Harm

	(1)	(2)	(3)
	Total	Food: Nutri-score E	Alcohol and Cigarettes
Treatment Group × Post-treatment Period (2016-2017)	5.767*** (1.928)	5.113*** (1.579)	0.654 (0.800)
Treatment Group × Post-treatment Period (2018-2019)	6.568*** (2.302)	5.146*** (1.907)	1.422 (0.939)
Demographic characteristics	yes	yes	yes
Year FE	yes	yes	yes
Region FE	yes	yes	yes
Regional unemployment rate	yes	yes	yes
Adj. R-Squared	0.06	0.07	0.01
Mean of outcome	113.41	93.05	20.36
Observations	38557	38557	38557

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on consumption spending divided into categories. Mean of outcome is average spending in a given category in the treated group in the pre-treatment period. See Table 1 for a description of the independent variables. The pre-treatment data starts in 2013 due to changes in the classification of goods and services.

* p<.10; ** p<.05; *** p<.01

Table A.17: Consumption Effects: Other (Ambiguous)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Total	Food: Nutri-score BCD	Clothing and Footwear	Transport	Furniture	Utilities	Personal Hygiene and Wellness	Phones and Computers
Treatment Group × Post-treatment Period (2016-2017)	22.330*** (6.668)	4.591*** (1.358)	4.748** (2.033)	3.162 (2.160)	2.931* (1.696)	3.865 (3.625)	2.237*** (0.798)	0.797 (0.628)
Treatment Group × Post-treatment Period (2018-2019)	18.059** (7.534)	5.148*** (1.556)	4.264* (2.263)	3.839 (2.520)	1.754 (2.016)	0.204 (3.975)	1.327 (0.928)	1.524** (0.643)
Demographic characteristics	yes	yes	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes	yes	yes
Region FE	yes	yes	yes	yes	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes	yes	yes	yes	yes
Adj. R-Squared	0.11	0.07	0.07	0.09	0.02	0.03	0.11	0.00
Mean of outcome	565.12	129.86	67.85	87.35	21.05	225.05	29.76	4.20
Observations	38557	38557	38557	38557	38557	38557	38557	38557

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on consumption spending divided into categories. Mean of outcome is average spending in a given category in the treated group in the pre-treatment period. See Table 1 for a description of the independent variables. The pre-treatment data starts in 2013 due to changes in the classification of goods and services.

* p<.10; ** p<.05; *** p<.01

Appendix B Heterogeneity Depending on Socioeconomic Status

Unfortunately, because of the lack of panel data, I have no information on pre-treatment incomes for parents observed in the data in the post-treatment period, and their post-treatment incomes are endogenous to the introduction of the cash transfer. Hence, it is impossible to directly analyze the heterogeneity of effects depending on income level.

I address the problem of the missing panel data by analyzing the variation in the effects depending on the predicted income based on the model estimated for the pre-treatment period. To this end, I estimate the following model

$$(2) \quad Y_{i,t} = \alpha_0 + \beta X_{i,t} + \epsilon_{i,t}$$

where $Y_{i,t}$ denotes household disposable income and $X_{i,t}$ is a set of covariates (mother's and father's age and education, urban/rural area, and region fixed effects). The R-squared of the estimated model is 0.26 (see Table B.1). I then predict the household income for all observations in the sample and divide the observations in each year into income tertiles, separately for the control and the treatment group. The drawback of this approach is that it relies on the variation in individual and household characteristics, which may themselves affect the size of the effects. Hence, these findings should be interpreted as the synthesis of the variation in the size of the effects depending on the socioeconomic status.

Table B.1: Prediction of Household Income

	(1)
	Disposable income
Age: Mother	14.387*** (1.177)
Age: Father	0.495 (1.151)
Secondary Education: Mother	136.820*** (9.985)
Secondary Education: Father	90.627*** (9.220)
Tertiary Education: Mother	402.473*** (11.605)
Tertiary Education: Father	415.282*** (11.659)
Small Town	-38.022*** (8.865)
Large Town	90.288*** (9.710)
Regional unemployment rate	-2144.794*** (399.416)
Region FE	yes
Adj. R-Squared	0.28
Observations	24097

Notes: Table shows the OLS estimates of the model of household disposable income in the pre-treatment period (2012-2015).
 * p<.10; ** p<.05; *** p<.01

Appendix C Adult Children

Table C.1: Eligibility for Means-tested Child Benefit

	Pre-treatment Simulation		Actual Post-Treatment Probability	
	No Adult Children	One Adult Child	No Adult Children	One Adult Child
Control Group	0.169	0.236	0.125	0.158
Treatment Group	0.244	0.429	0.242	0.434

Notes: Table compares the simulated and the actual eligibility for the means-tested child benefit among households without adult children aged 18-24 years old and households with one adult child aged 18-24 years old. In columns 1 and 2, I simulate the probability of having per capita earnings below the eligibility threshold for the means-tested child benefit using pre-treatment data (2014-2015). I adjust the pre-treatment earnings measure by the growth rate of average earnings between the 2014-2015 and 2017-2019. In columns 1 and 2, I show the actual probability of receiving the means-tested transfer in the post-treatment period (2017-2019).

Table C.2: Effects of the Unconditional Cash Transfer: No Adult Children

	(1)	(2)	(3)	(4)	(5)	(6)
	Income	Earnings	Consumption	Savings	Employment	Full-time Employment
Treatment Group \times Post-treatment Period (2016-2017)	89.644*** (16.543)	4.238 (16.038)	44.017*** (14.198)	45.627*** (14.340)	0.005 (0.007)	-0.005 (0.004)
Treatment Group \times Post-treatment Period (2018-2019)	108.411*** (21.848)	-18.550 (21.083)	49.794*** (17.612)	58.618*** (20.122)	-0.006 (0.009)	-0.004 (0.005)
Demographic characteristics	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes
Region FE	yes	yes	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes	yes	yes
Adj. R-Squared	0.28	0.31	0.18	0.08	0.14	0.03
Mean of outcome	1229.99	1074.77	999.07	230.91	0.78	0.95
Mean of child benefit (2016-2017)	93.80	93.80	93.80	93.80	93.80	92.57
Mean of child benefit (2018-2019)	117.80	117.80	117.80	117.80	117.80	115.83
Observations	37943	37943	37943	37943	75886	58998

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on six outcomes. The sample consists of households with no adult children. Columns 1-4 show the results for household-level outcomes. Columns 5-6 show the results for parents' individual-level outcomes. The treatment group consists of households with two children aged 3-17. The control group consists of households with one child aged 3-17. The pre-treatment period includes observations from the 2012-2015 period, and the post-treatment period includes observations from the 2016-2018 period. The sample includes households with two parents aged between 29 and 49 at the time of the introduction of the child benefit. I exclude households who own a farm. The demographic characteristics include mother's and father's age and educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodeships). The standard errors are clustered at the level of the household. Mean of outcome is the mean of a given outcome in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group.

* $p < .10$; ** $p < .05$; *** $p < .01$

Table C.3: Effects of the Unconditional Cash Transfer: At Least One Adult Child

	(1)	(2)	(3)	(4)	(5)	(6)
	Income	Earnings	Consumption	Savings	Employment	Full-time Employment
Treatment Group \times Post-treatment Period (2016-2017)	96.946***	-21.488	40.600	56.346*	0.001	-0.004
	(37.480)	(37.885)	(35.572)	(33.890)	(0.020)	(0.012)
Treatment Group \times Post-treatment Period (2018-2019)	57.788	-61.552	-0.398	58.185	-0.013	-0.009
	(43.993)	(44.488)	(38.636)	(40.508)	(0.022)	(0.013)
Demographic characteristics	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes
Region FE	yes	yes	yes	yes	yes	yes
Regional unemployment rate	yes	yes	yes	yes	yes	yes
Adj. R-Squared	0.25	0.25	0.15	0.07	0.10	0.02
Mean of outcome	1137.16	957.75	960.90	176.26	0.74	0.94
Mean of child benefit (2016-2017)	109.84	109.84	109.84	109.84	109.84	109.74
Mean of child benefit (2018-2019)	131.04	131.04	131.04	131.04	131.04	126.91
Observations	6546	6546	6546	6546	13092	10095

Notes: Table shows difference-in-differences estimates of the effects of the introduction of the universal child benefit on six outcomes. The sample consists of households with at least one adult children. Columns 1-4 show the results for household-level outcomes. Columns 5-6 show the results for parents' individual-level outcomes. The treatment group consists of households with two children aged 3-17. The control group consists of households with one child aged 3-17. The pre-treatment period includes observations from the 2012-2015 period, and the post-treatment period includes observations from the 2016-2018 period. The sample includes households with two parents aged between 29 and 49 at the time of the introduction of the child benefit. I exclude households who own a farm. The demographic characteristics include mother's and father's age and educational level, as well as the type of residence area (urban/rural). The region fixed effects are the fixed effects for NUTS-2 regions (16 voivodships). The standard errors are clustered at the level of the household. Mean of outcome is the mean of a given outcome in the treated group in the pre-treatment period. Mean of child benefit is the difference in the average reported child benefit amount between the treatment group and the control group.

* $p < .10$; ** $p < .05$; *** $p < .01$

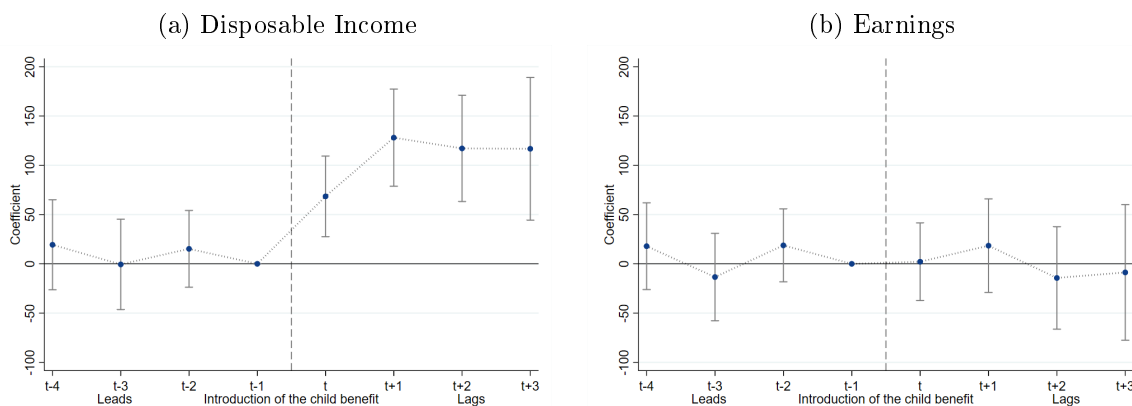


Figure C.1: Effects on Income and Earnings: No Adult Children

Notes: Figure shows the leads and lags of the effects of the introduction of the unconditional cash transfer on household disposable income and household earnings. The sample consists of households with no adult children. Each data point represents the point estimate and the 95% confidence interval of the coefficient on interaction of the treatment group dummy and year. I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household.

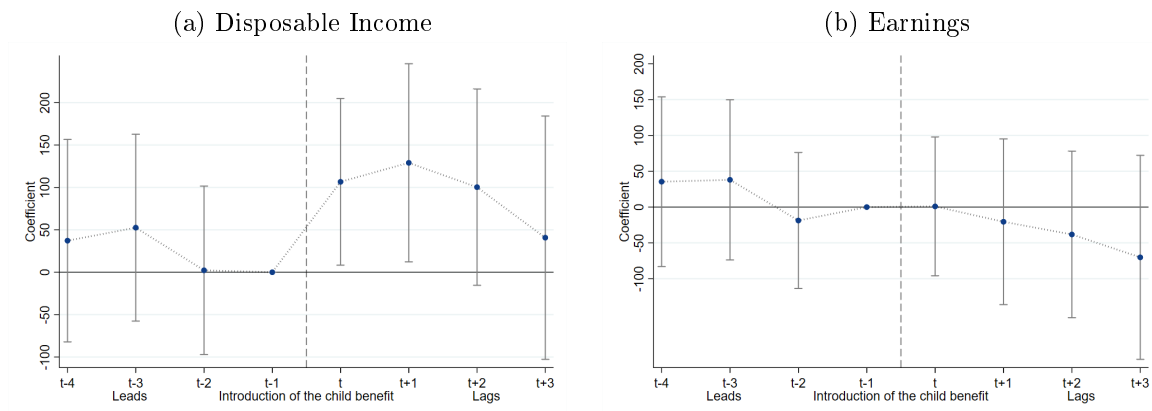


Figure C.2: Effects on Income and Earnings: At Least One Adult Child

Notes: Figure shows the leads and lags of the effects of the introduction of the unconditional cash transfer on household disposable income and household earnings. The sample consists of households with no adult children. Each data point represents the point estimate and the 95% confidence interval of the coefficient on interaction of the treatment group dummy and year. I control for demographic characteristics (mother's and father's age and educational level, as well as the type of residence area), year fixed effects, region fixed effects (NUTS-2 regions), and the monthly regional unemployment rate. The confidence intervals are based on standard errors that are clustered at the level of the household.

Appendix D Data Appendix

Table D.1: Variable Descriptions

Variable	Description
<i>Treatment Variables</i>	
Treatment group	dummy variable, 1: household with two children aged 3-17, 2: household with one child aged 3-17
Post-treatment	dummy variable, 1: 2016-2018, 0: 2012-2015
<i>Dependent Variables</i>	
Child Benefit	income from the child benefit introduced in 2016 (świadczenie wychowawcze)
Disposable Income	sum of current household income (in a given month) less prepayments of personal income tax paid by the payer on behalf of the taxpayer (on income from employment and on certain social security and other benefits), taxes on property income, taxes paid by self-employed persons, social and health insurance contributions.
Earnings	total household net wage earnings, severance pay, income from self-employment, and income support due to paid leave (in a given month)
Consumption	sum of expenditures on consumer goods and services, private transfers, and taxes paid directly by individuals (in a given month).
Savings	the difference between household disposable income and household expenditure
Employment	dummy variable, 1: non-zero individual earnings, 0: zero individual earnings
Full-time Employment	dummy variable, 1: reported working full-time, 0: reported working part-time
<i>Control Variables</i>	
Age	age in years
Education: primary	the highest level of education that a person has successfully completed: basic vocational (zasadnicze zawodowe), elementary education (gimnazjum / podstawowe / niepełne podstawowe) or no education
Education: secondary	the highest level of education that a person has successfully completed: general secondary (średnie ogólnokształcące), vocational secondary (średnie zawodowe) or post-secondary (policealne / pomaturalne)
Education: tertiary	the highest level of education that a person has successfully completed: college degree (wyższe)
Rural area	a person living in a village
Small town	a person living in a small town (2,000 - 100,000 inhabitants)
Large town	a person living in a large town (over 100,000 inhabitants)

Notes: Description of the variables used in the analysis. Disposable income, earnings, savings, and child benefit are expressed in 2016 U.S. dollars (I adjust nominal values by the USD/PLN exchange rate from 2016 and Harmonized Index of Consumer Prices).

Consumption Expenditure Categories

To facilitate the analysis, detailed expenditure categories are aggregated into broader categories, and the value of each variable is the sum of expenditure in the detailed categories belonging to the corresponding broad category. The pre-treatment data starts in 2013 due to changes in the classification of goods and services. The list below provides the expenditure variables and the detailed categories included in each variable.

Additionally, I assigned nutritional rating letters from A (best) to E (worst) to detailed food and beverages categories, using the Nutri-Score rating system created by Santé Publique France.⁵ The nutritional score is positively affected by content of fruits, vegetables, nuts and legumes fiber content, protein content, content rapeseed, walnut and olive oil. It is negatively affected by high energy density per 100 g or per 100 ml, high sugar content, high content of saturated fatty acids, and high salt content. I use data from *OpenFoodFacts* to determine the nutritional score of a product.⁶

Health: pharmaceutical products; pregnancy tests and mechanical contraceptives; other medical products not elsewhere classified; corrective glasses and contact lenses; hearing aids; repair of therapeutic equipment and devices; other therapeutic equipment and devices; general practitioner services; specialist physician services; dental services; medical laboratory and radiology services; thermal baths, corrective exercise, emergency medical services, and rental of therapeutic equipment; auxiliary medical and unconventional medicine services; hospital and sanatorium services.

Food: Nutri-score A: rice; wheat flour; other flours; groats and grains; bread; other baked goods; pasta and noodle products; other cereal products; curd cheese; eggs; citrus fruits; bananas; apples; berries; stone fruits; other fruits; frozen fruits; dried fruits and nuts; fruit preserves; lettuce; cabbage; cauliflower; tomatoes; cucumbers; carrots; beets; onions; other vegetables and mushrooms; frozen vegetables and mushrooms; potatoes; other root vegetables and root vegetable preserves; food for children.

Home Production Equipment: refrigerators, freezers, and fridge-freezers; washing, drying, and dishwashing appliances; cookers and stoves; heating and ventilation equipment; cleaning

5. <https://www.santepubliquefrance.fr/determinants-de-sante/nutrition-et-activite-physique/articles/nutri-score>

6. <https://world.openfoodfacts.org/>

equipment; other durable household equipment; food preparation and processing appliances; coffee makers and kettles; irons; toasters and grills; other small household electrical appliances; repair of household appliances; home and garden equipment and tools.

Education: kindergartens and primary schools; secondary schools, technical and vocational schools, high schools; post-secondary non-tertiary education institutions; tertiary education institutions; education undefined by level of teaching.

Restaurants and Hotels: restaurants; cafes, tea rooms; tips in restaurants, cafes, tea rooms; fast food bars and takeaway food; canteens; accommodation; hotels, motels, and similar accommodation services; tips in hotels, motels, and similar accommodation services; campsites, tent sites, and shelters; dormitories, student dorms, and other accommodation services; organized tourism; expenditures abroad on tourism.

Recreation Equipment: equipment for receiving, recording, and playing sound; equipment for receiving, recording, and playing sound and image; portable sound and video players; other equipment and accessories for receiving, recording, and playing sound and image; photographic and cinematographic equipment; accessories for photographic and cinematographic equipment; optical instruments; recorded media; recording media; other recording media not previously specified; expenses on recreational vehicles such as motorhomes, caravans and trailers; aircraft, gliders, hang gliders and balloons; boats, outboard engines and boat equipment; horses, ponies and equestrian accessories; other durable equipment for outdoor sports and recreation; musical instruments; durable equipment for indoor recreation; maintenance and repair of other durable equipment related to recreation and culture; games and collectibles; toys and novelty items; sports equipment; camping equipment for outdoor recreation; repair of sports equipment, camping equipment and outdoor recreational equipment; gardening supplies; plants and flowers; pets; pet supplies; veterinary services and other services for pets.

Culture: services related to recreation and sports - spectators; services related to recreation and sports - participants; cinemas, theaters, concerts; museums, libraries, zoological gardens; radio and television fees; rental of equipment and accessories related to culture; photographic services; other services related to culture; gambling; fiction books; textbooks; other books; bookbinding and purchase of e-books; newspapers; magazines; various prints; stationery; other writing, painting and drawing materials.

Food: Nutri-score E: condensed and powdered milk; butter; other animal fats; chocolate; confectionery products; non-alcoholic beverages not elsewhere classified.

Alcohol and Cigarettes: spirit drinks; liqueurs; low-alcohol drinks; grape wine; wine from other fruits; fortified wine; wine-based drinks; Lager beer; other alcoholic beer; low-alcohol and non-alcoholic beer; beer-based drinks; cigarettes; cigars; other tobacco products; illicit drugs.⁷

Clothing and Footwear: clothing materials; men's clothing; men's underwear; men's hosiery products; women's clothing; women's underwear; women's hosiery products; children's clothing (up to 13 years old); children's underwear (up to 13 years old); children's hosiery products (up to 13 years old); other clothing articles; haberdashery products; clothing cleaning, dyeing, washing services; other clothing services; men's shoes; women's shoes; children's shoes (up to 13 years old); shoe services.

Food: Nutri-score BCD: offal and offal products; fresh or chilled fish; frozen fish; fresh whole milk; low-fat fresh milk; yogurt; sauerkraut; other vegetable and mushroom products; potato products; artificial sweeteners; tea; cocoa and powdered chocolate; vegetable and vegetable-fruit juices; breakfast cereals; chickens, roosters, and young chickens; other poultry; poultry cold cuts; fresh or chilled seafood; frozen seafood; dried, smoked, or salted fish and seafood; other fish and seafood products; milk-based beverages and other dairy products; margarine and other vegetable fats; sauces, spices; salt; spices and herbs; fruit juices; pizza and other pasta products; beef; veal; pork; lamb and goat meat; other meats; deli meats, except poultry; mixed ground meat; other meat products; mature and melted cheeses; cream; olive oil; other edible oils; chips; sugar; jams, marmalades; honey; ice cream; coffee.

Transport: tires; spare parts for private transportation; accessories for private transportation; diesel fuel; gasoline; other fuels for private transportation; lubricants, oils, fluids; maintenance and repair of private transportation; renting garages or parking spaces for private transportation; fees for tolls and parking; driving lessons, driver's license exams, driver's licenses, mandatory technical inspections of vehicles; passenger transport by train; passenger transport by subway and tram; passenger transport by bus and coach; passenger transport by taxi or hired car with driver; tips for taxi drivers; domestic flights; international flights; passenger transport by

7. The expenditure on alcohol and cigarettes may be more sensitive to misreporting than other categories of the expenditure.

sea; inland passenger transport; mixed passenger transport; cable car transport, cable cars, chairlifts; moving and storage services; other transportation services not elsewhere classified.

Utilities: actual rent for renting real estate - first house or apartment; actual rent for renting second and subsequent houses or apartments; actual rent for using garage or parking space related to first and subsequent houses or apartments; materials for repairing and maintaining apartments or houses; plumbing services; electrical services; maintenance of heating systems; painting services; carpentry services; other services related to the maintenance of apartments or houses; supply of cold water; waste removal services; sewage services; administrative costs and other fees related to housing; security services; other services related to housing; electricity; natural gas and city gas; liquid gas; liquid fuels; coal; firewood; other solid fuels; hot water; central heating; delivery of letters; other postal services; tips for couriers; landline telephone services; mobile telephone services; internet services; telecommunication services.

Furniture: furniture for apartments or houses; garden furniture; lighting equipment; other furniture and decorative items; carpets and carpeting; other floor coverings; laying of floor coverings; furniture repair and articles for furnishing and decorating apartments; upholstery fabrics and curtains; bed linen; table linen and bathroom linen; repair of textile articles; other textile articles for household use; glassware and tableware; cutlery and silverware; non-electric household appliances and articles; repair of glassware, tableware, and other household appliances and articles.

Personal Hygiene and Wellness: hairdressing services for men and children; tips for hairdressing services for men and children; hairdressing services for women; tips for hairdressing services for women; cosmetic and grooming services; tips related to cosmetic and grooming services; electric personal hygiene devices; repair of electric personal hygiene devices; non-electric personal hygiene devices; cosmetic and hygiene products.

Phones and Computers: landline telephone equipment; mobile telephone equipment; other telecommunications equipment; repair of telecommunications equipment; computers; accessories for information processing equipment; software; calculators and other information processing equipment.

Savings Expenditures Categories

Cash: an increase in cash (cash at the end of the month less cash cash at the end of the previous month).

Repayment of Loans: repayment of loans and mortgages (including interest); repayment of loans and credit card debts taken out from banks (including interest); repayment of remaining loans and credits taken out from banks (including interest); repayment of loans and credits taken out from other institutions (including interest); repayment of monetary loans taken from private individuals (including interest).

Financial Assets: deposits paid into housing societies; other deposits paid into banks; deposits paid into other institutions; advance payments, security deposits; purchase of securities.

Tangible Assets: purchase of buildings and structures for non-business purposes; materials for construction, reconstruction, expansion, renovation, and modernization of buildings and structures for non-business purposes; services related to the construction, reconstruction, expansion, renovation, and modernization of buildings and structures for non-business purposes; renovation fund; purchase of land for non-business purposes; expenses for future business activities; other capital expenses.

Additional Income Categories

Social Assistance (excl. Child Benefit): pensions; pensions for transferred agricultural holdings; disability pensions; survivor's pensions; maternity benefits; other social insurance benefits; family allowances; allowances for child care during parental leave; allowances for single-parent child care; other supplements to family allowances; care allowances, special caregiver's allowances; care allowances; assistance for childbirth; benefits from the Alimony Fund; housing allowances; social pensions; permanent, periodic benefits and other monetary, material and service assistance; assistance from non-commercial institutions; scholarships; other social benefit income; unemployment benefits; other benefits for the unemployed.

Private Transfers: alimony payments from private individuals; other gifts from private individuals to the household.

Capital Income: income from property; income from renting buildings and structures not related to business activity; income from renting land not related to business activity; sale of used consumer goods; sale of buildings and structures not related to business activity; sale of land not related to business activity; sale of movable property remaining after liquidation of business activity; sale of other capital goods; income from loans granted to other private individuals; income from advance payments, security deposits; income from deposits made in banks; income from deposits made in other institutions; benefits received from life insurance; compensation received from home insurance; benefits received from voluntary health and accident insurance; compensation received from transport-related insurance; compensation received from other types of insurance.