



Short-Term Impacts of Unconditional Cash Transfers on Child Labor and Schooling in Turkey:

Evidence from the Family Support Program

Aysun Aygun



Short-Term Impacts of Unconditional Cash Transfers on Child Labor and Schooling in Turkey: Evidence from the Family Support Program*

Aysun Hiziroglu Aygun ¹

Unconditional cash transfers (UCTs) have become a worldwide tool for poverty alleviation and social protection. In this study, we examine the impact of a one-year UCT program on children's work and schooling outcomes in Turkey. More specifically, we study the short-term effects of unconditional cash transfers on children's work and schooling. The Family Support Program (FSP) cash support was introduced in 2022 to provide a modest cash transfer to low-income families. The program eligibility is determined by a per capita family income threshold. We exploit this discontinuity in program eligibility and show that the cash transfers led to a decrease in the likelihood of children working in their family's businesses within six months. There is also suggestive evidence that the likelihood of children working in agriculture declines. In response to the decline in non-market work, children's time spent on school work does not increase significantly.

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1. Introduction

There are 160 million children in child labor worldwide (ILO, 2024). These children are usually deprived of their education, live in poverty, and work to generate income to support their families. Engaging in child labor creates long-term losses as children who work are more likely to drop out of and or not attend school regularly.

Unconditional cash transfers (UCTs) are used worldwide as a tool for poverty alleviation and social protection. UCTs have also become effective in improving the conditions for children in poverty, by keeping them out of child labor and in school, depending on the context (Edmonds, 2006; Edmonds and Schady, 2012; de Hoop et al., 2019; de Hoop, Groppo and Handa, 2019). In this study, we examine the short-term effects of a UCT in Turkey, the Family Support Program (FSP) on children's schooling and work. FSP offers monthly payments for one year to low-income families. The cash transfers began in June 2022, and the program reached 3 million households. Considering that the average household size in Turkey was 3.17 people in 2022 (TurkStat, 2022), the program is estimated to have reached over 9 million individuals within that year. FSP has become one of Turkey's largest social assistance programs targeted to Turkish nationals, and it caught up with universal health insurance, the flagship social support program. The FSP payments to households are very modest and they range between 850-1900 Turkish Lira (TL) per month.² A family with five or more children and a monthly income of less than 450 TL per person would receive 1900 TL per month, slightly higher than one-third of the monthly minimum wage in 2022. The program paid a total of 13 billion TL in 2022 (representing approximately 0.087% of the total GDP for that year), within six months after its launch.

We use data from the Turkey Child Survey (TCS) collected by the Turkey Statistical Institute (TurkStat) between October and December 2022. The survey includes information on whether families received family support within the last 12 months, with 12.3 percent of households

¹ A separate program Emergency Social Safety Net is another unconditional cash transfer program that targets refugees who live in Turkey.

² The transfers depend on the monthly per capita household income and range as follows:1250 TL payment for an income of 450 TL or lower, 1100 TL payment for an income between 450 TL and 911 TL, 950 TL payment for an income between 911 TL and 1372 TL, and 850 TL payment for an income between 1372 TL and 1833 TL. The child support component ranges between 350-650 TL depending on the number of children.

affirming FSP recipiency.³ The FSP cash transfer program has an income eligibility rule, set as the per capita household income being less than one-third of the after-tax minimum wage. We use this income eligibility threshold and a regression discontinuity design to assess the impact of the FSP policy on children's schooling, work, and health outcomes. We show that within six months, the cash transfers led to decreases in the likelihood of children working in the family business. This was accompanied by a suggestive decrease in the children's likelihood of taking up agricultural work. The probability of school enrolment remained unaffected by the cash transfers, while the children's emotional well-being improved slightly.

2. Background: Family Support Program

Turkey provides various forms of family support to low-income families under specific conditions. These include one-time transfers to families with a newborn child, ongoing transfers for families with multiples up to age two, and assistance for women who lost a husband or children who lost a parent. Additionally, cash assistance is available for families of those in military service, veterans, and martyrs. To qualify for these transfers, applicants must meet one of the specified categories and demonstrate economic need for social assistance.

The coverage of the family support programs was extended in 2022 with the introduction of the unconditional cash transfer program, Turkey Family Support Program (FSP), which offers regular monthly payments to low-income families for one year. The cash transfer program is offered based on income eligibility, which is set as the per capita income being less than one-third of the after-tax minimum wage.

The FSP is the first need-based unconditional cash transfer program in Turkey that is available to a wide range of Turkish nationals without eligibility requirements tied to events such as the loss of a family member or the birth of a child. The program was designed to be inclusive and reach

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³ Although the survey does not distinguish between unconditional cash transfers and other types of family support, it predominantly captures the FSP due to its higher statistical likelihood compared to other forms of assistance within the family support category. FSP reached 3 million households in 2022. In contrast, other transfers covered a smaller number of individuals: For example, widow payment was given to 89 thousand women, military family support to 65 thousand households, 47 thousand children who lost a parent received cash support, 816 thousand mothers received newborn cash support, and 28 thousand received multiple birth support.

families who did not fit into the other categories supported by the social assistance system. FSP also does not exclude households with a member in formal employment (i.e. registered with the social security system) unlike most other programs in Turkey, such as universal health insurance.⁴

There are also other social assistance programs organized in other categories within the Ministry of Family and Social Services operations. Some of these programs also use the same income eligibility rule as the FSP. Among those, multiple-birth transfers are given on the condition of giving birth to multiples. Elderly and disability transfers are provided if the family lacks social security and an old-age (above 65) or disabled member exists. Government-subsidized health insurance is also conditional on lacking social security. Education materials and food, shelter, and transportation support for the children who live outside the bussed-schooling system are provided for the children who attend school. The food and shelter program provides food before the religious holidays (which can be extended throughout the year in case needed) or helps with heating based on the income eligibility threshold. In that sense, the income eligibility rule is not unique to the UCTs we study. Hence, we test how the likelihood of receiving family support and other benefits in the last 12 months is affected by the eligibility rule based on the household's income per capita. In Table 1, we show that both FSP and food and shelter recipiency are significantly more likely for households with a per-capita income below one-third of the minimum wage. Therefore, we interpret our results as the joint effect of being eligible for these programs.

3. Dataset: Turkey Child Survey

We use micro dataset Turkey Child Survey (TCS), obtained from the Turkish Statistical Institute (TurkStat). The survey was carried out in collaboration with TurkStat, the Ministry of Family and Social Policies' General Directorate of Child Services, and UNICEF Turkey. The fieldwork for the TCS was conducted by the TurkStat across Turkey between October 10 and December 16, 2022. The study sample includes 9,010 households with at least one child aged 0-17. The sample size of the study was designed to be representative of Turkey.

⁴ The only exclusion criteria for FSP are having a civil servant, a muhtar (the elected neighborhood heads), or a notary in the household.

Information about children aged 0-17 living in these households was collected. If the mother did not live in the household or was deceased, the information was obtained from the primary caregiver (e.g., father, grandmother, aunt, or other household members). Mothers or primary caregivers provided information on various topics for children aged 0-12 in the household, including education, living conditions, early childhood development, health, disabilities, school quality of life, parental involvement, breastfeeding and nutrition, social and cultural participation, child labor, and child discipline. We use the 0-12 age sample for whom the source of information is mothers in our analysis.⁵

The household income is reported by the survey respondent. We calculate the per capita household income by using the number of residents related to the household head as recorded in the household member information questionnaire. In our analysis, we use several outcome variables, including dummies for family work, agricultural work, and domestic work of children. We also analyze children's time spent in working, school, and studying. We analyze daily food consumption, and children's health problems too.

Table 2 shows the descriptive statistics for the variables we use in our analysis. They refer to the children living in households with a 900 TL bandwidth on both sides of the cutoff. Information about children's work and schooling were collected for ages above 5. The descriptive statistics provide a comprehensive overview of children's participation in non-market work, domestic work, time allocation, food consumption, and health outcomes. Participation in non-market work is relatively low, with 3.3% of children working for their families and 9.1% engaged in agricultural activities. In contrast, domestic work is more common, with 33.7% of children involved in shopping, 14.9% in cleaning, and 41.8% engaged in at least one type of domestic task. On average, children spend 0.37 weekly hours on market work and 0.93 weekly hours on domestic work. They dedicate 5.66 hours per day to school, 3.96 hours per week to studying on weekdays, and 1.88 hours per week on weekends. In terms of daily food consumption, 54.9% of children consume fruits, 33% consume vegetables, 11.4% consume proteins, and 10.6% consume pulses, while higher proportions report consuming grains (63.6%) and dairy products (59.4%). However,

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⁵ For the older age category, TurkStat dropped observations in case of nonresponse. To avoid any potential bias of attenuation in our sample, we keep the age group for which information was collected with the mother interviews.

consumption of less healthy items such as soda drinks (13.8%), sweets (33.2%), and unhealthy snacks (21.4%) is also notable. Regarding health outcomes, 27.8% of children reported experiencing a health problem in the last two weeks, and 6.7% had an untreated health issue during this period. Additionally, 33.5% of children were reported as seeming depressed or unhappy.

The descriptive statistics in Table 2 further provide insights into children's beneficiary status on social transfers. Among the children in our sample, 14.9% benefit from the FSP, while only 1.2% receive Conditional Cash Transfers (CCT). The share of children benefiting from education material support stands at 3.0%, while 5.9% receive assistance for food and shelter. Disability and old-age benefits are accessed by 3.7% of the children's households, and 6.5% benefit from health-related transfers. Other forms of support are less common, with only 2.0% reporting access to other social benefits.

4. Methodology: Regression Discontinuity Design Approach

We exploit the income eligibility cutoff in a regression discontinuity design to identify the effect of receiving cash transfers. The eligibility criteria for households receiving FSP cash benefits is a per capita household income of less than one-third of the after-tax minimum wage. Hence, we expect a jump in FSP beneficiary status and child wellbeing outcomes at this cutoff value. We estimate these reduced-form effects of the income eligibility criterion with the sharp RDD specification,

$$y_{i,j} = \beta_0 + \beta_1 T_j + I(T_j = 0) x_j^2 + I(T_i = 1) x_j^2 + X_{i,j} \Gamma + u_{i,j}, \tag{1}$$

where $y_{i,j}$ denotes the outcome variable for child i in household j. The treatment variable, T, takes the value of one when the household per capita income is less than one-third of the minimum wage and zero otherwise. We control for the quadratic trend in per-capita household income on the cutoff's left- and right-hand sides by the interaction of the indicator function I(.) and x_j^2 where x_j is the per capita household income in household j. X stands for the set of control variables, u for the error term, and β_1 gives the reduced-form effect of the income eligibility criterion on the outcome variable.

The control variables, *X*, include dummy variables for children's gender and age, as well as dummy variables indicating if the mother and father of the children died. We also control for the household composition by including a dummy variable if there are multiples below age 2, or an infant (less than age 1) within the household, the number of children in the following age groups: under age 5, 5-13 and above age 13 and the number of adults within the household. Finally, we include dummies for the household head's education categories (missing, primary/middle, secondary, and higher). We cluster the standard errors at the household level in all regression analyses and use survey weights.

Some households with a per capita household income above the eligibility ratio receive other forms of family support by meeting other criteria, and not all households on the left-hand side of the cutoff receive cash transfers. Therefore, using a fuzzy RDD to measure the effect of being a beneficiary by using 2SLS estimation would have been possible. However, since the threshold is also significantly related to the food and shelter transfers 2SLS regressions would be biased. For that reason, we only report the reduced-form results and interpret the coefficients accordingly.

In our analysis, we use parametric bandwidths for RDD. We restrict the bandwidth for per capita income to the range between 750 TL and 900 TL based on statistical considerations. Specifically, bandwidths narrower than 750 TL yield insufficient observations, and a statistically insignificant first stage, and 900 TL represents the maximum bandwidth where pre-determined characteristics remain statistically non-significant, thus preserving our RDD assumptions. As a result, we concentrate on bandwidths of 750, 800, 850, and 900 TL on both sides of the cutoff point.

Appendix Figure 1A shows the absence of manipulation at the eligibility rule cut-off for the households in our analysis sample.

5. Results

Figure 1 shows the jump in FSP recipiency status at the threshold per capita income level. The RD plot reveals a modest but statistically significant treatment effect. Although the point estimate for cash transfer recipiency shows a small jump at the income threshold, the confidence intervals on the treated side (left-hand side of the threshold) do not overlap with the mean outcome of the

untreated side (right-hand side of the threshold). This suggests a meaningful treatment effect, even if the magnitude of the effect appears small.

Figure 2 and Figure 3 illustrate the proportion of children engaged in different types of work, comparing those on either side of the eligibility threshold for the cash transfer program, concentrating on outside and domestic work respectively. In Figure 2, a drop in the fraction of children in family work is observed, however, no obvious drop at the cutoff is observed in the other outcome variables. In Figure 3, there is a drop in the proportion of children who take care of the elderly and children.

Figure 4 illustrates the time spent on paid and unpaid school work for children. Even though there is a drop in unpaid work hours and school hours, these are not statistically significant.

Figure 5 shows the proportion of children who consume various food items daily. At the threshold, there is a drop in daily consumption of grains and unhealthy food items such as soda drink, snacks and sweets. Finally, Figure 6 shows the children's health problems and their treatment status in the last two weeks. The figure illustrates a jump in the proportion of children with health problems in the last two weeks.

Table 3 explores the impact of per capita family income eligibility on children's non-market work, domestic work, and time spent in work, school, or studying. In non-market work, the policy significantly reduces participation in family work and agriculture work, with the largest effect on "any non-market work". For domestic work, the policy reduces time spent on cooking, but effects on other domestic tasks such as cleaning, care, and shopping are insignificant. Regarding time allocation, while weekly hours spent on work and domestic work decrease, the changes are statistically insignificant. There is a positive but insignificant effect on school

hours (daily) and study hours (weekday and weekend). These findings suggest that the policy reduces children's involvement in non-market family work and some domestic tasks like cooking but does not significantly impact time allocated to formal education or studying.

Table 4 examines the effect of per capita income eligibility on food consumption and child health outcomes around the cutoff. For daily food consumption, the policy significantly reduces vegetable consumption and dairy consumption at higher income thresholds (900–850 TL), while soda consumption consistently decreases across all thresholds. The policy effects on other food categories like fruit, protein, pulses, grain, sweets, and unhealthy snacks are negative or near zero but statistically insignificant. For child health outcomes, the policy has no significant effect on general or untreated health problems but is associated with a reduction in children "seeming depressed or unhappy" across all income levels. These results suggest that while the policy may reduce some unhealthy food consumption (e.g., soda), it also negatively affects nutritious food intake, such as vegetables and dairy which can be explained by the suggestive evidence on the decline in agricultural work. There is also evidence suggesting that the policy improves children's emotional well-being slightly.

6. Conclusion

This paper presents evidence that a modest cash transfer policy decreased the likelihood of young children engaging in non-market work in a very short period. However, the program did not generate any significant increase in school work. One positive outcome of the program on children is the improvement in their emotional wellbeing not reported as seeming sad or unhappy very often by their mothers.

We do not find any increase in children's daily protein or dairy intake despite the fact that the eligibility threshold is significantly related to food and shelter support beneficiary status. On the contrary, children's vegetable and dairy product intake decreases probably due to the decrease in their likelihood of engaging in agricultural work, hence not accessing these food items.

Tables and Figures

Table 1: The Effect of the Income Criterion on Receiving Social Transfers

| Per Capita Family Income on Both Sides of the Cutoff (TL) | | | | |
|---|----------|----------|----------|----------|
| | 900 | 850 | 800 | 750 |
| FSP | 0.194*** | 0.198*** | 0.206*** | 0.211*** |
| Policy Effect | [0.039] | [0.040] | [0.045] | [0.046] |
| CCT | | | | |
| Policy Effect | 0.012 | 0.013 | 0.014 | 0.007 |
| | [0.013] | [0.013] | [0.015] | [0.014] |
| Education Material | | | | |
| Policy Effect | 0.005 | 0.004 | 0.005 | -0.002 |
| | [0.019] | [0.020] | [0.022] | [0.022] |
| Food and Shelter | | | | |
| Policy Effect | 0.107*** | 0.108*** | 0.100*** | 0.098*** |
| | [0.023] | [0.023] | [0.025] | [0.026] |
| Disability and Old-Age Ben | efits | | | |
| Policy Effect | 0.041 | 0.042 | 0.036 | 0.039 |
| | [0.025] | [0.025] | [0.029] | [0.030] |
| Health Benefit | | | | |
| Policy Effect | -0.022 | -0.021 | -0.050 | -0.049 |
| | [0.037] | [0.037] | [0.041] | [0.043] |
| Other Benefit | | | | |
| Policy Effect | -0.017 | -0.016 | -0.012 | -0.016 |
| | [0.018] | [0.018] | [0.020] | [0.021] |
| Observations | 6,034 | 6,001 | 5,557 | 5,460 |

Table 2: Descriptive Statistics

| A)Non-Market Work | Mean | S.D. | Min. | Max. | Obs. | |
|--|-------|-------|------|------|-------|--|
| Works for the Family | 0.033 | 0.179 | 0 | 1 | 4,006 | |
| Works in Agriculture | 0.091 | 0.288 | 0 | 1 | 4,006 | |
| Any Non-market Work | 0.102 | 0.303 | 0 | 1 | 4,006 | |
| B)Domestic Work | | | | | · | |
| Cooking | 0.086 | 0.280 | 0 | 1 | 4,006 | |
| Cleaning | 0.149 | 0.356 | 0 | 1 | 4,006 | |
| Child and Elderly Care | 0.087 | 0.282 | 0 | 1 | 4,006 | |
| Shopping | 0.337 | 0.473 | 0 | 1 | 4,006 | |
| Any Domestic Work | 0.418 | 0.493 | 0 | 1 | 4,006 | |
| C)Time Spent In Work, School or Studyi | ing | | | | | |
| Work Hours (Weekly) | 0.370 | 1.710 | 0 | 40 | 4,006 | |
| Domestic Work Hours (Weekly) | 0.925 | 2.947 | 0 | 66 | 4,006 | |
| School Hours (Daily) | 5.656 | 2.406 | 0 | 15 | 4,006 | |
| Weekday Study Hours (Weekly) | 3.957 | 5.670 | 0 | 80 | 4,006 | |
| Weekend Study Hours (Weekly) | 1.880 | 2.707 | 0 | 16 | 4,006 | |
| D)Daily Food Consumption | | | | | | |
| Fruits | 0.549 | 0.498 | 0 | 1 | 5,840 | |
| Vegetables | 0.330 | 0.470 | 0 | 1 | 5,840 | |
| Proteins | 0.114 | 0.317 | 0 | 1 | 5,840 | |
| Pulses | 0.106 | 0.308 | 0 | 1 | 5,840 | |
| Grain | 0.636 | 0.481 | 0 | 1 | 5,840 | |
| Dairy Products | 0.594 | 0.491 | 0 | 1 | 5,840 | |
| Soda Drink | 0.138 | 0.345 | 0 | 1 | 5,840 | |
| Sweets | 0.332 | 0.471 | 0 | 1 | 5,840 | |
| Unhealthy Snacks | 0.214 | 0.410 | 0 | 1 | 5,840 | |
| E)Child's Health | | | | | | |
| Health Problem (last 2 weeks) | 0.278 | 0.448 | 0 | 1 | 6,034 | |
| Health Problem Untreated (last 2 weeks) | 0.067 | 0.250 | 0 | 1 | 6,034 | |
| Seems Depressed/Unhappy | 0.335 | 0.472 | 0 | 1 | 5,271 | |
| F)Beneficiary Status on Social Transfers | | | | | | |
| FSP | 0.149 | 0.356 | | | 6,034 | |
| CCT | 0.012 | 0.108 | 0 | 1 | 6,034 | |
| Education Material | 0.030 | 0.169 | | | 6,034 | |
| Food and Shelter | 0.059 | 0.235 | 0 | 1 | 6,034 | |
| Disability and Old-Age Benefits | 0.037 | 0.189 | 0 | 1 | 6,034 | |
| Health Benefit | 0.065 | 0.247 | 0 | 1 | 6,034 | |
| Other Benefit | 0.020 | 0.139 | 0 | 1 | 6,034 | |

Table 3: The Effect of the Income Criterion on Child Labor, Domestic Work

| | Per Capita Family Income on Both Sides of the Cutoff (TL) | | | | | | | |
|-------------------|---|----------------------|----------|----------|----------|--|--|--|
| | | 900 | 850 | 800 | 750 | | | |
| A)Non-Market Work | Works for the Far | Works for the Family | | | | | | |
| | Policy Effect | -0.070* | -0.067* | -0.084** | -0.085** | | | |
| | | [0.037] | [0.037] | [0.039] | [0.040] | | | |
| | Works in Agricul | ture | | | | | | |
| | Policy Effect | -0.105** | -0.097* | -0.095 | -0.092 | | | |
| | | [0.051] | [0.052] | [0.058] | [0.060] | | | |
| | Any Non-market | Any Non-market Work | | | | | | |
| | Policy Effect | -0.136** | -0.127** | -0.133** | -0.133** | | | |
| | | [0.056] | [0.057] | [0.063] | [0.065] | | | |
| B) Domestic Work | Cooking | | | | | | | |
| | Policy Effect | -0.101* | -0.107** | -0.101* | -0.113* | | | |
| | | [0.053] | [0.053] | [0.060] | [0.060] | | | |
| | Cleaning | | | | | | | |
| | Policy Effect | -0.059 | -0.061 | -0.059 | -0.044 | | | |
| | | [0.064] | [0.065] | [0.073] | [0.075] | | | |
| | Child and Elderly | Care | | | | | | |
| | Policy Effect | -0.073 | -0.070 | -0.077 | -0.074 | | | |
| | | [0.049] | [0.050] | [0.057] | [0.057] | | | |
| | Shopping | | | | | | | |
| | Policy Effect | -0.009 | -0.018 | -0.023 | 0.029 | | | |
| | | [0.080] | [0.081] | [0.087] | [0.090] | | | |
| | Any Domestic W | ork | | | | | | |
| | Policy Effect | -0.045 | -0.054 | -0.059 | -0.029 | | | |
| | | [0.080] | [0.081] | [0.087] | [0.090] | | | |
| | Observations | 4,006 | 3,982 | 3,690 | 3,628 | | | |

Table 4: The Effect of the Income Criterion on Time Use

| Per Capita Family Income on Both Sides of the Cutoff (TL) | | | | | | |
|---|------------|---------|---------|---------|--|--|
| | 900 | 850 | 800 | 750 | | |
| Work Hours (Weekly) |) | | | | | |
| Policy Effect | -0.365 | -0.327 | -0.299 | -0.313 | | |
| | [0.314] | [0.318] | [0.362] | [0.374] | | |
| Domestic Work Hour | s (Weekly) | | | | | |
| Policy Effect | -0.569 | -0.603 | -0.649 | -0.535 | | |
| | [0.452] | [0.452] | [0.503] | [0.516] | | |
| School Hours (Daily) | | | | | | |
| Policy Effect | 0.312 | 0.308 | 0.206 | 0.166 | | |
| | [0.209] | [0.206] | [0.222] | [0.228] | | |
| Weekday Study Hours (Weekly) | | | | | | |
| Policy Effect | 0.075 | 0.081 | 0.030 | 0.045 | | |
| | [1.059] | [1.068] | [1.138] | [1.164] | | |
| Weekend Study Hours (Weekly) | | | | | | |
| Policy Effect | 0.025 | 0.042 | 0.318 | 0.377 | | |
| | [0.436] | [0.439] | [0.494] | [0.506] | | |
| Observations | 4,006 | 3,982 | 3,690 | 3,628 | | |

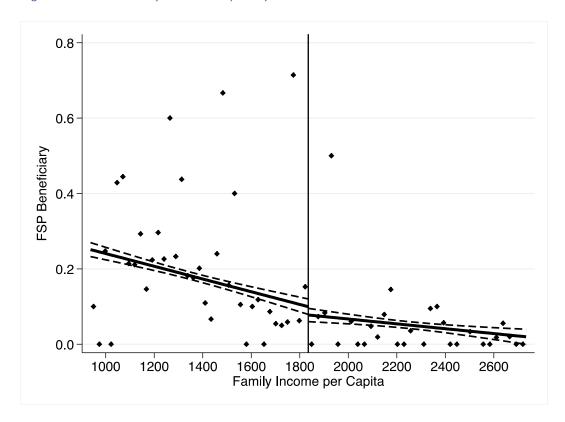
Table 5: The Effect of the Income Criterion on Children's Food Consumption

| Per Capita Family Income on Both Sides of the Cutoff (TL) | | | | | |
|---|----------|----------|----------|---------|--|
| Fruit | 900 | 850 | 800 | 750 | |
| Policy Effect | -0.113 | -0.098 | -0.015 | -0.011 | |
| | [0.078] | [0.078] | [0.087] | [0.089] | |
| Vegetables | | | | | |
| Policy Effect | -0.125* | -0.114 | -0.131 | -0.118 | |
| | [0.076] | [0.077] | [0.085] | [0.088] | |
| Protein | | | | | |
| Policy Effect | 0.072 | 0.074 | 0.086 | 0.075 | |
| | [0.057] | [0.058] | [0.066] | [0.068] | |
| Pulses | | | | | |
| Policy Effect | 0.018 | 0.017 | 0.027 | 0.019 | |
| | [0.057] | [0.058] | [0.066] | [0.068] | |
| Grain | | | | | |
| Policy Effect | -0.031 | -0.024 | -0.03 | -0.067 | |
| | [0.078] | [0.078] | [0.086] | [0.089] | |
| Dairy | | | | | |
| Policy Effect | -0.168** | -0.170** | -0.135 | -0.135 | |
| | [0.081] | [0.082] | [0.089] | [0.092] | |
| Soda | | | | | |
| Policy Effect | -0.139** | -0.128** | -0.125** | -0.125* | |
| | [0.055] | [0.056] | [0.063] | [0.065] | |
| Sweets | | | | | |
| Policy Effect | -0.063 | -0.058 | -0.064 | -0.059 | |
| | [0.076] | [0.077] | [0.086] | [0.089] | |
| Unhealthy Snacks | | | | | |
| Policy Effect | -0.101 | -0.082 | -0.111 | -0.100 | |
| | [0.070] | [0.071] | [0.079] | [0.081] | |
| Observations | 5,840 | 5,807 | 5,376 | 5,282 | |

Table 6: The Effect of the Income Criterion on Children's Health

| Per Capita Family Income on Both Sides of the Cutoff (TL) | | | | | | |
|---|---------|---------|---------|---------|--|--|
| Health Problem | | | | | | |
| Policy Effect | 0.034 | 0.031 | 0.031 | 0.002 | | |
| | [0.067] | [0.067] | [0.075] | [0.078] | | |
| Untreated Health Pro | blem | | | | | |
| Policy Effect | 0.013 | 0.015 | 0.015 | 0.019 | | |
| | [0.047] | [0.048] | [0.053] | [0.056] | | |
| Obs. | 6,034 | 6,001 | 5,557 | 5,460 | | |
| Seems Depressed/Unhappy | | | | | | |
| Policy Effect | -0.143* | -0.126* | -0.146* | -0.158* | | |
| | [0.075] | [0.076] | [0.085] | [0.087] | | |
| Obs. | 5,271 | 5,243 | 4,863 | 4,778 | | |

Figure 1: Discontinuity in FSP recipiency



Notes: Source: Turkey Child Survey, 2022. The graph shows FSP recipiency within 900TL on both sides of the cutoff.

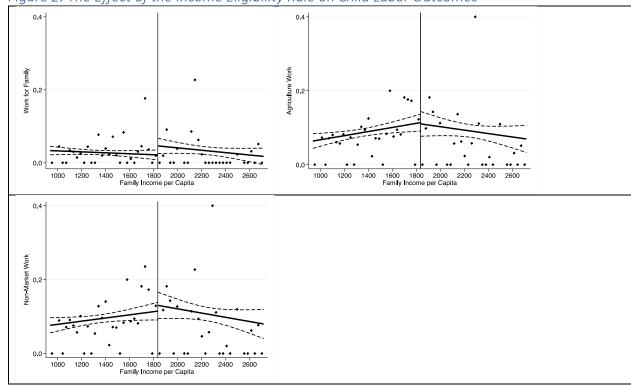


Figure 2: The Effect of the Income Eligibility Rule on Child Labor Outcomes

Notes: Source: Turkey Child Survey, 2022. The graph shows the outcomes within 900TL on both sides of the cutoff for children younger than 13.

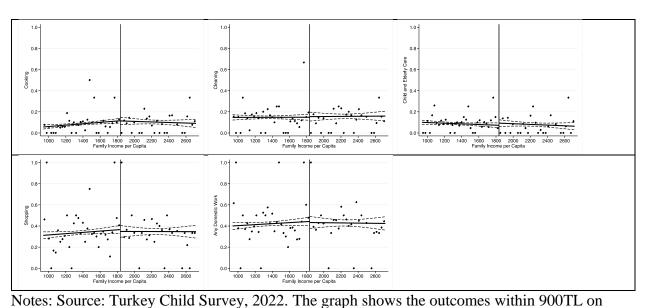


Figure 3: The Effect of the Income Eligibility Rule on Domestic Work Outcomes

both sides of the cutoff for children younger than 13.

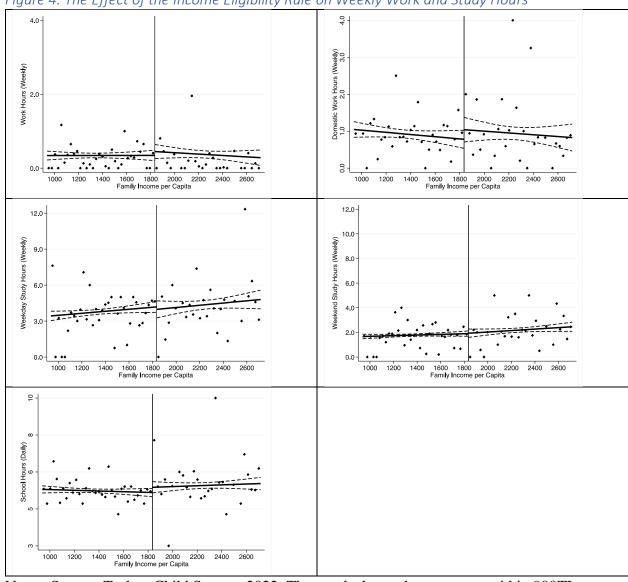
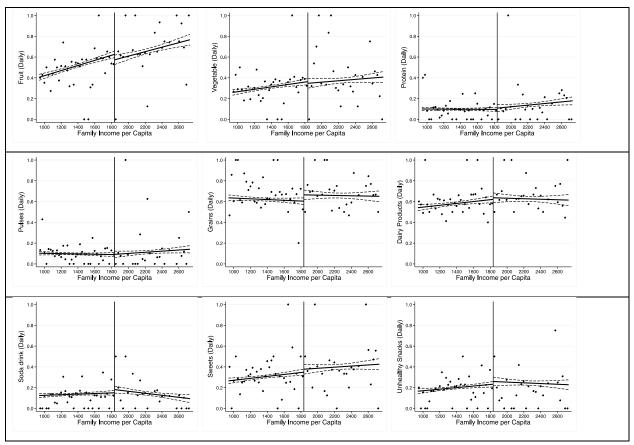


Figure 4: The Effect of the Income Eligibility Rule on Weekly Work and Study Hours

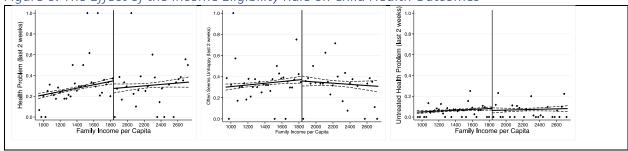
Notes: Source: Turkey Child Survey, 2022. The graph shows the outcomes within 900TL on both sides of the cutoff for children younger than 13.

Figure 5: The Effect of the Income Eligibility Rule on Daily Food Consumption Outcomes



Notes: Source: Turkey Child Survey, 2022. The graph shows the outcomes within 900TL on both sides of the cutoff for children younger than 13.

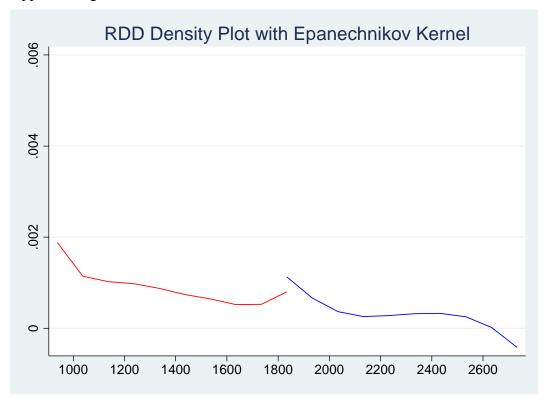
Figure 6: The Effect of the Income Eligibility Rule on Child Health Outcomes



Notes: Source: Turkey Child Survey, 2022. The graph shows the outcomes within 900TL on both sides of the cutoff for children younger than 13.

Appendix Tables and Figures

Appendix Figure 1A



Notes: Manipulation test using the local polynomial density estimators proposed in Cattaneo et al. (2020) and Cattaneo et al. (2021). Stata command rddensity. A local quadratic approximation with kernel epanechnikov weights is used to construct the density estimators, while a cubic approximation is used for the bias-corrected density estimator. The density estimation method is restricted-assuming equal distribution function and higher-order derivatives. Robust bias-corrected statistic with asymptotic plugin standard errors and uniform confidence interval at 95% level (2000 of simulations).

References:

Aile ve Sosyal Politikalar Bakanlığı, 2022 Faaliyet Raporu, Ankara, 2022. https://www.aile.gov.tr/raporlar/yillik-faaliyet-raporlari/

- de Hoop, J., Friedman, J., Kandpal, E., and Rosati, F. C. (2019). Child Schooling and Child Work in the Presence of a Partial Education Subsidy. *Journal of Human Resources*, 54(2), 503-531.
- de Hoop, J., Groppo, V., and Handa, S. (2019). Cash Transfers, Microentrepreneurial Activity, and Child Work: Evidence from Malawi and Zambia. *The World Bank Economic Review*.
- Edmonds, E. V. (2006). Child labor and schooling responses to anticipated income in South Africa. *Journal of Development Economics*, 81(2), 386-414.
- Edmonds, E. V., and Schady, N. (2012). Poverty alleviation and child labor. *American Economic Journal: Economic Policy*, 4(4), 100-124.
- International Labour Office and United Nations Children's Fund, Child Labour: Global estimates 2020, trends and the road forward, ILO and UNICEF, New York, 2021. https://www.ilo.org/topics/child-labour-statistics-and-research