QUALITATIVE AND QUANTITATIVE ANALYSIS OF IMPACT OF CONDITIONAL CASH TRANSFER PROGRAM IN TURKEY
PROJECT REPORT

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CONDITIONAL CASH TRANSFER PROGRAM IN TURKEY

Project Coordinator:
Cemalettin ÇOĞURCU
Asst. General Directorate

**Department Responsible
for the Project:**
Şebnem AVŞAR KURNAZ
Head of R & D and Promotion

Project Manager:
A. Fatih ORTAKAYA
Family and Social Policy Expert

Project Evaluation Comission:
Ersin BİÇER
Family and Social Policy Expert
Caner ESENYEL
Family and Social Policy Expert
Samet GÜNEŞ
Family and Social Policy Expert
Nazlıhan ÖZGENÇ
Asst. Family and Social Policy Expert
Pınar YAVUZKANAT
Asst. Family and Social Policy Expert

Project Monitoring Committee:
Cemalettin ÇOĞURCU
Asst. General Directorate
Şebnem AVŞAR KURNAZ
Head of Department
Prof. Dr. Servet ÖZDEMİR
Gazi University Asst.
Rıdvan KURTİPEK
Ministry of Development, Head of
Department
Nurhan PARLAK ŞAHİN
Ministry of Development, Planning Expert
Nilay EROL
TURKSTAT, Team Leader
Yılmaz ERŞAHİN
TURKSTAT, Team Leader

**Project Director and Coodinators
of the Researchers:**
Prof. Dr. Servet ÖZDEMİR
Gazi University

Project Researchers:
Prof. Dr. Muhittin ACAR
Hacettepe University
Prof. Dr. Nezir KÖSE
Gazi University
Prof. Dr. Jülide YILDIRIM ÖCAL
TED University
Asst. Prof. Adnan BOYACI
Anadolu University
Asst. Prof. Ferudun SEZGİN
Gazi University

Area Coordinators:
Prof. Dr. Sefer AYCAN
Gazi University
Prof. Dr. Ahmet AYPAY
Eskişehir Osmangazi University
Prof. Dr. Bilal GÜNEŞ
Gazi University
Prof. Dr. Mustafa SAFRAN
Gazi University
Asst. Prof. Necati CEMALOĞLU
Gazi University
Asst. Prof. Bülent GÜLOĞLU
Pamukkale University

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EXECUTIVE SUMMARY

Given the existence of a considerable degree of poverty in Turkey, some recent anti-poverty efforts have been directed at tackling with root causes of poverty to overcome the inequalities in opportunities. The General Directorate of Social Assistance (GDSA), which is affiliated to the Ministry of Family and Social Policies, implements nation-wide benefit and poverty reduction programs. Social assistance policies aimed at disadvantaged groups were developed. Among them are conditional health and education transfers which constitute an important tool aiming at enhancing human capital accumulation by emphasizing social inclusion.

The CCT program in Turkey has three main components, health, education and pregnancy care support. The conditional education grants are provided to children of the target group conditional on school enrollment, from the first grade through the end of the twelfth grade. Once qualified as beneficiaries, children should maintain at least 80 per cent attendance rate to continue to receive the grant. The grants are higher for girls in order to encourage families to educate their daughters. According to 2011 figures, a primary school student boy receives nearly 15 US Dollars per month, whereas a primary school student girl gets nearly 20 US Dollar as conditional transfer. For secondary school students the grants are 25 US Dollars and 30 US Dollars for boys and girls, respectively. The health support is provided for the children aged between 0 – 6 years and is approximately 15 US dollars per month. The health support is conditional on regular visits to health care centre and the completion of vaccinations. Moreover, as of January 2005 health support for pregnant women is also provided, which is conditional upon regular health centre visits of pregnant women, encouraging in – hospital deliveries.

The Purpose of the Project

The aim of this project is to evaluate the impact of Conditional Cash Transfer Program implemented in Turkey to assess if the desired objectives have been achieved. Both qualitative and quantitative analysis have been employed in this assessment, thus allowing researchers to use a wide range of data, leading to more reliable inferences at the end of the analysis.

The Method

The general method used in quantitative analysis was a quasi -experimental approach using a difference -in – difference calculation of effects and impacts attributable to conditional cash transfer program implemented in Turkey. A pre-test/post-test comparison group design was used with the families in the comparison groups selected from municipalities ineligible to participate in the program. The treatment group on the other hand was selected from the beneficiaries.

A questionnaire consisting of 120 questions has been developed. After a pilot study conducted with a sample of 60 households, a revised and improved questionnaire has been designed. Then two separate surveys had been undertaken. The first survey has been conducted during March – April 2011. A qualitative analysis has also been performed simultaneously with the first survey. The second survey has been conducted one year after the initial survey during August 2012 - September 2012.

A stratified random sampling procedure was followed, with two stages of stratification, Turkey rural – urban and NUTS 1 12 regions. The questionnaire has been applied to both treatment and control groups at the initial time March-April 2011 and one year following the initial survey, covering 10.797 and 8.752 applicants at the first stage and second stage, respectively. The realization rates were 74 per cent and 69 per cent, for the first survey and second survey, respectively. The main reason for the decrease in the realization rate could be high mobility of targeted group as they tend to move whenever and wherever they find an employment opportunity. Families were interviewed at the start of the program and at several points during implementation, avoiding problems of linear extrapolation when only one post-test measurement is made.

Demographic Profile

Demographic analysis of the households covered in both survey reveals that the majority of the respondents are female in the 26 -35 years age group (nearly 95 per cent).

Most of them are graduates of primary school, living with their spouses and have at least 3 children. The family size is larger in rural areas compared to the urban areas. Additionally Eastern Mediterranean and Southeastern Anatolian regions have larger family sizes than rest of the regions. Overall, the number of disabled people is below 0.5 per household, without any significant difference between rural and urban areas.

It appears that migration is not an issue for the respondents. Generally, people migrate from rural to urban areas; from small villages and towns to large metropolis. The largest immigrant-receiving regions are İstanbul, Aegean and Mediterranean regions. The majority of immigrants to these regions are originally from Eastern regions. The main reason for migration is financial difficulties faced at the home region and the hope to find an employment to earn a living.

Nearly one third of the respondents own their houses; one third do not pay any rent. The highest rent payments are made in İstanbul and Western Marmara regions. The families that need to pay rent generally receive rent support from the General Directorate, especially in the Central and Eastern Regions.

Around 90 per cent of the households have children under the age of 18, the highest number belonging to the Southeastern Anatolia, where 5 per cent of children work.

The average household size is 4.81for treatment group and 4.75 for the control group, little higher than the Turkey average which was 4.50 at the 2000 household budget survey.

Almost all of the respondents are in favor of education for their children, and generally support female employment. The child labor ratio in both the treatment and the control groups are below country average of 5.9 per cent. This could be due to the fact that these families prefer their children to have education in order to be eligible for CCT programs.

Migration rate is above the national average of 2.47 per cent for 2009-2010 period. But the migration rate for the control group is higher than that of the treatment group.

Qualitative Analysis

In order to assess the impact of conditional cash transfer programs, in-depth face-to-face interviews have been conducted with beneficiaries, applicants for transfers whose application had been rejected, school principles, school teachers and healthcare providers.

Although different definitions are provided regarding the conditional cash transfers, the majority of the respondents agree that they are "money given to those who are in need of help" or "assistance provided to children for educational purposes". However the respondents are not clear about the origin of the transfers.

The respondents in our survey recognized that, primarily they need to spend the money to their children's educational needs. However, the majority of them (48 per cent) stated that they used the money for their basic consumption needs: food, vegetables, meat and dairy. Whereas nearly 20 per cent of the respondents claim that they spend the stipend on clothing; 17 per cent spent transfers on children's educational needs, such as stationary, school uniforms, and shoes.

All of the respondents agree that it is wise to give the stipends to mothers who spend money for their children's needs in the first place. Thanks to the transfer program, beneficiary women find themselves more powerful, have a greater say in family decisions, and they can spend the money as they see fit. Additionally, 60 per cent of the respondent mothers spend the stipend all by themselves; whereas 22 per cent of them make spending decisions together with their husbands. Only 17 per cent of mothers give the stipends to their husbands without any joint decision-making.

The majority of the respondents in the field study (63 per cent) stated that with their participation in the conditional cash transfer program, their children's achievements and school attendance have been positively affected. They claimed that there has been an increase in the level of self-confidence and self-esteem of the children. They all agree that their children are happier now and they attend their school more enthusiastically.

Nearly two thirds of the respondents stated that they had not faced with any obstacle during the application process. Nearly one third of them expressed that the process had been easy to follow with a very helpful personnel they easily had filled the application form.

The school principles generally believe that they play a crucial role in the targeting mechanism and their responsibilities should be increased. They claim that the CET program has not fully achieved its objectives. The main reason is the uncertainty about the expenditure patterns of the families. Secondly the transfer amounts are quite small. However, they believe that CCT program encourages children to attend to school and be successful. The principles agree that the relationship between the schools and the beneficiary families have been improved since the transfer program begun.

Teachers are aware of the objective of CETs and the requirements for its continuation. But they observe that the grants are not being used for their intended purpose, which may undermine the effectiveness of the CCT program. They agree that the positive affect of CET are quite limited. But there has been an improvement in attendance and academic success of the student beneficiaries.

The great majority of the healthcare workers agree that the amount of the grant is quite small, not enough to meet the beneficiaries' basic needs. The respondents agree that conditional health transfers have a positive impact on children's healthcare as there has been an increase in the number of visits by families bringing their children for regular check-ups and/or vaccinations due to the conditionality of the payments.

The healthcare workers are optimistic about the impact of conditional health transfers on general level of health at their district / province. They claim that the main reason for the improvement at the general level of health at their province is the increased consciousness level of families about health issues and gaining the good habit of regular doctor visits.

Quantitative Analysis

Examination of the e–school data provided by the Ministry of Education indicate that 2007/2008 academic year absenteeism rates are higher in the control group compared to the treatment group. There has been an increase in absenteeism rates for boys and girls over the years for the control group, from 4.17 per cent in2007 / 2008 academic year to 5.36 per cent in 2009 / 2010 academic year. Similarly, even though absenteeism rates for the treatment group are lower, it has an increasing tendency, from 2.14 per cent in2007 / 2008 academic year to 3.07 per cent in 2009 / 2010 academic year.

The enrollment rate in the treatment group is higher compared to the control group. Additionally, there has been a significant increase in the enrollment rates in 2009/2010 academic year compared to the previous academic year. Giving support to positive the impact of CCT program, secondary school enrollment rates are lower in the control group compared to the treatment group. Overall, descriptive analysis indicates that CCT program has been effective in achieving its aim of increased school attendance and secondary school enrollment.

In order to assess the impact of CCT program on school absenteeism and secondary school enrollment rates, e-school data pertaining to academic years 2007 / 2008-2009 / 2010 have been subjected to a regression analysis. The estimation results indicate a positive impact of CCT program on absenteeism for overall Turkey, especially for rural areas. It emerges that girls' average absenteeism rate is lower than that of boys for both groups. The positive impacts are more pronounced in Mediterranean Region.

There is a positive impact from CCTs on secondary school enrollment, especially in urban areas. Even though the probability of enrollment for urban areas increased marginally from 2008 / 2009 academic year to 2009 / 2010 academic year, there has been a reduction in the probability of enrollment for rural areas in 2009 / 2010 academic year. The probabilities for secondary school enrollment are higher for boys in the control group, whereas the probabilities are higher for girls in the treatment group, especially in the urban areas.

Generally enrollment rate for boys are higher than that of girls. However when CCT program is introduced, girls in the treatment group are more likely to continue their education compared to boys. The probabilities are higher for the treatment group supporting the effectiveness of CCT program. The probabilities for secondary school enrollment are higher for girls in the treatment group, especially in the urban areas. The probability of a girl's secondary school enrollment is 0.79 in rural areas and 0.82 in urban areas in the treatment group. Whereas, these probabilities for girls in the control group are 0.36 and 0.49, in rural and urban areas, respectively. The probability of a boy's secondary school enrollment is 0.76 in rural areas and 0.79 in urban areas in the treatment group. These probabilities for boys in the control group are 0.44 and 0.50, in rural and urban areas, respectively.

Additionally, a regression analysis to investigate the impact of conditional health transfers on the level of satisfaction with healthcare services has been carried out. It emerges from the analysis that there has been a positive impact of CCT programs on healthcare services satisfaction level, even though this effect is limited to only several regions. Additionally, CCT beneficiaries' level of satisfaction with healthcare services has increased even though there has been a reduction in the overall level of satisfaction

The examination of the elasticity of various types of expenditures reveals that for the urban areas, only the health expenditure has an income elasticity greater than one whereas in the rural areas in addition to healthcare, communication expenditures has also an income elasticity which is greater than one.

Recommendations

Presented in order of priority, the recommendations below are a preliminary set of considerations that emerged from this report that could be necessary for avoiding the major failures of CCTs implemented to date in various countries.

There is an apparent need for more publicity about the nature and objectives of the Conditional Cash Transfer Programs in Turkey.

It emerged from our analysis that the trust in the targeting mechanism is low. In order to improve the trust in the targeting mechanism, a more objective and fair targeting method that takes regional differences into account could be developed.

As the majority of the beneficiaries express their difficulties in the process of application, it is recommended that measures should be taken to overcome these difficulties.

Even though there are positive impacts on health and education outcomes, women's participation in labor force is limited for the beneficiary families. In addition to CCT programs, employment generating projects especially for women should be initiated.

The satisfaction level with the healthcare services should be improved, in collaboration with the Ministry of Health.

When the income elasticities of different types of comsumption are examined, it appears that food, education, rent, transportation, heating, clothing and smoking have income elasticities less than one, indicating that these commodities are necessities. Whereas health and communication are luxury goods. Thus, empirical analysis suggests that improvements in income brought by CCT grants will lead to increases in smoking expenditures as well. Therefore a greater care should be devoted to channel the spending of grants for immediate needs, especially of children.

1. Introduction

Persistent disparities in aggregate growth and large differences in the wealth of the Eastern and Western regions have long been among the main concerns of policymakers in Turkey. Additionally, there has been a continuing effort towards the alleviation of poverty by emphasizing the importance of social cohesion and social inclusion in the framework of a free market society context. In 2001, Turkey suffered the most severe economic crisis in its modern history. As a rapid response to financial crisis, the Social Risk Mitigation Project (SRMP) has been initiated in 2001, which was financially supported by the World Bank and was constituted under the Social Assistance and Solidarity Foundation. The SRMP incorporated a model for restructuring existing social policy in Turkey in line with the envisaged re-regulation of the society, by improving the institutional capacities of state institutions dealing with poverty problem.

The main aim of SRMP has been to assign new functions to social policy with the aim of generating greater social inclusion in addition to provide mechanisms to cope with the poverty as a market misery. The SRMP was designed to empower and expand the available social safety net programs, aiming to alleviate the impact of the then-recent economic crisis on poor households. In order to achieve these objectives, the SRMP initiated Conditional Cash Transfer Programmes (CCT). The CCTs provide continuous cash transfers conditional on positive behavioral change, in order to induce the demand for education and health services among the poor. These programmes represent a shift in government's approach of focusing on the supply-side to a demand-driven approach. The CCTs target disadvantaged people and aim to enhance future human capital in addition to providing immediate poverty relief. The CCT programs mainly consider children, rather than their parents, as the main recipients of transfers. Hence the program aspire to prevent the intergenerational transfer of poverty in the long run, by developing mechanisms for strengthening human capital through providing access to proper health and education services to the poor. This new approach of social assistance explicitly addresses several criticisms often levied at more traditional social assistance programs such as weak poverty targeting, high administrative and component costs, accusations of paternalism and clientelism (Rawlings, 2004). Contrary to the traditional social assistance programs which have focused on short-term poverty alleviation trough redistribution during times of crisis, CTT programs addresses both short term and long turn poverty.

Conditional cash transfer programs have novel features compared to the traditional social assistance programs. Under the framework of CCT programs grants are directly provided to poor households, thereby changing accountability relationships among the national government, service providers, and the poor. Moreover, the conditions required by the grants provide an incentive for poor households to use available health and education services, strengthening the link between service providers and the poor. The direct relationship between the governments and poor households, established by means of CCTS, oblige families to assume responsibility for schooling, health care, and the appropriate use of the cash grants. Generally mothers are designated as recipients of the grants in recognition of the international evidence suggesting that women often make more optimal household spending decisions affecting children's welfare. Additionally, CCT programs

recognize the complementarities between elements of human capital development and thus are comprised of health, nutrition, and education components. As the use of cash, which is regarded as efficient and flexible, gives households, especially mothers, spending discretion and avoids the price distortions and creation of secondary markets that are often associated with in-kind transfers. Generally, conditional cash transfer programs entail many spill-over effects in terms of good technical assistance and support facilities provided by underlying technological infrastructure (Rawlings and Rubio, 2005).

The aim of this study is to investigate the impact of CCT program in Turkey on education and health using qualitative and quantitative research methods. For this purpose, following a pilot study, two field surveys have been conducted in 12 main provinces of Turkey during March 2011 – April 2011 and March 2012 – April 2012. In-depth interviews with beneficiaries and key informants have also been conducted. The qualitative research analysis indicates that conditional education and health transfers have positive impact on both education and health outcomes. In addition to a qualitative analysis, a quantitative analysis has also been performed. Overall both qualitative and quantitative analyses indicate that the Conditional Cash Transfer Programs have positive impacts on education and health outcomes, even though there are regional differences.

2. Assessment and Comparison of CCT Programs

Conditional cash transfer programs are interventions aimed to promote the use of and the demand for social services. They are a type of performance-based payment system on the demand side, aiming to alter attitudes towards social services. CCT programs are designed to enhance the demand for health and education services by the poor. Generally poor people lack sufficient knowledge about the existence of these services or they face considerable costs while accessing these services, such as transportation, clothing and school fees, etc. Alternatively there may be opportunity costs of these services, such as income lost when a child is sent to school instead of work. CCT programs aim to eliminate these barriers as much as possible, thus stimulate demand for health and education services by providing incentives to access services by reducing direct costs. They generally directly increase household income and also inhibit household decisions to purchase low cost services. Moreover payments conditional on actions can counteract social norms that may drive households to invest less on females. By conditioning payment on receipt of specified services, household decisions to choose low cost and low quality substitutes may be altered. Besides, these programs can stimulate providers to be more responsive and accountable to households in the process of management strengthening that leads to increased utilization.

In every country where social assistance programs are implemented, studies examining the impact of these transfers on education, health, poverty, gender equality, domestic relations, child labor and diet have been conducted. The main objective of these studies is to investigate the effectiveness of these programs and efficiency of investments so that necessary measures can later on be taken to improve the program's design and implementation. Another important issue is to observe the beneficiaries' reaction to the program. Impact analysis also contributes to the program's transparency

and accountability. Following the results of impact analysis, required modifications can be made in the structure and implementation of the program so that a more transparent, more effective, easier-to-implement program can be created.

Impact analysis studies that are carried out in various countries generally employ household surveys data (health, education and labor force surveys), or the data obtained from custom-designed surveys. In addition to these surveys, in-depth qualitative research and analysis are generally carried out. Furthermore, school attendance, academic performance records of the students and health indicators of the beneficiaries are examined. Generally, the findings from impact analysis studies indicate that (conditional) cash transfer programs contribute to poverty reduction efforts. These studies show that CCTs enhance school enrollment rates and reduce child labor. Aside from immediate relief from poverty, these families can afford to buy consumption goods so that their children can have a healthy and nutritious diet, which in turn contribute to a healthy generation. The effectiveness of the program is enhanced as social benefits are granted to women.

The overall objective of the CCT programs for education has been to prevent child labor and to promote school enrollment and attendance of the children from poor families in such a manner that poor families can be compensated for the income they could have obtained from child labor, and thus they can invest for their children's education to break the cycle of poverty (Silva, 2000). The existing literature agrees that CCT programs have positive effects on education and health of beneficiaries. For example, in Mexico, the CCT program led to significant increases in both girls' and boys' school enrollment rates. The secondary education enrollment rates for boys and girls have increased by 6% and 9%, respectively. While girls generally tend to drop out of school at secondary school, there has been a 15 per cent increase in the transition rate from primary to secondary education (Last, 2008). De Janvry et al. (2006), claim that there has been a 7.8 percent reduction in the drop-out rate in Brazil. Chaudhury and Parajuli (2008) report that CCT program implemented in Pakistan led to a 9 percent increase in girls' enrollment rates. But Borraz and Gonzales (2009) state that the CCT program in Uruguay did not have any significant effect on schooling of children.

There have been increases in enrolment rates, especially at the secondary level enrollment, in Turkey and Colombia following the start of the CCT programs. Yet, a satisfactory progress has not been achieved considering school attendance, achievement, and reductions in drop – out rates in both countries. Thus there has been a suggestion to revise the CCT programs or compliment them with alternative measures to achieve the desired objectives. Another reason for relatively low enrollment rates for countries like Turkey, Mexico and Colombia could be high enrollment rates prior to the introduction of CCT programs (Son, 2008).

CCT programs implemented in developing countries to alleviate poverty generally have a positive impact on children's development. In almost all developing countries, young children of the poor families are the ones who are most adversely affected by poverty. Malnutrition and infectious diseases are commonly seen in those children (Desai & Alva, 1998; Haddad et al., 2003). This in

turn adversely affects children's emotional, social and cognitive development. Gertler and Fernald (2004) report that children of low income Mexican families have a limited vocabulary and low cognitive development test scores for their age compared to their high income peers. Paxson and Schady (2007) report similar findings for children in Ecuador. Grantham-McGregor et al. (2007) employ data relating to 200 million children less than 5 years of age living in developing countries and report that poor children generally are not successful in school and thus they are highly likely to be employed at low- paid jobs in their future lives. These children tend to have several off-springs of their own without any means to support them, thus contributing to the intergenerational transmission of poverty.

Empirical evidence suggests that favorable socioeconomic factors positively impact children's development and wellbeing, thus lending support to the CCT programs that provide cash transfers to poor families to relive them from immediate poverty and invest in their children's human capital. These transfers can be unconditional, or can be conditioned on their children's school attendance and health care services utilization. In the latter case, one of the objectives is to change the behavior of poor families regarding their demand for education and health services. Duflo (2004) and Agüeroet al. (2006) show that CCT programs in South Africa positively affect poor children's health. There has been an improvement in the height and weight of beneficiary girls. Gertler (2004), Behrman and Hoddinott (2005), andRivera et al. (2004) report that children whose families are the beneficiaries of Mexico's Oportunidades Program grow 1 cm taller at the end of the first 18 months of the program compared to those who are not beneficiaries. Maluccio and Flores (2004) state that Nicaragua's CCT program led to an improvement in nutritional intake of children.

Leroy et al. (2009) claim that CCT programs affect children's nutrition via alternative mechanisms. Firstly, CCT programs lead to a rise in the income levels of poor families so that they can afford to buy quality goods that are highly nutritious. Grants are usually given to mothers of poor families. Beneficiary women generally tend to allocate more resources for their children's health, education and nutritional needs compared to men. Besides, pregnant women also receive cash transfers for their use of health care services. They have healthy pregnancy and healthy delivery, with no or limited number of complications such as contagious diseases. CCT programs generally favor girls, who become educated mothers who will then be able to provide much better health and education opportunities to their children. A healthy nutritional diet in children contributes to their cognitive development and academic success, leading to increase their productivity and earnings in their future lives (Ruel &Hoddinott, 2008). Mexican CCT program Progresa led to a decrease in anemia in children living in both urban and rural areas (Rivera et al., 2004). There has been a 12 per cent reduction in illnesses seen in children in Mexico. Whereas the reduction is much higher (19 per cent) regarding adult illness and absence from work. The CCT program in Honduras led to a 15 -21 per cent rise in demand for health services by children.

Even though reduction of child labor has been cited among the major goals of CCT programs, transfers conditional on school attendance negatively affect child labor. The children of the poor families, generally, work in order to provide income for their household. If the family gets the

amount of money equivalent to their children's earnings, they may choose to send their children to school instead of work. Thus an indirect impact on child labor is expected, but there is no clear legislation forbidding them to send their children to work. Parker and Skoufias (2000) report that Progresa program implemented in Mexico led to a 15 per cent reduction in the likelihood of employment for boys aged 14 -15, but there is not any significant impact on employment opportunities of boys ages 16 -17. This impact is larger for girls, such that the reduction in likelihood of employment has been reported to be 25 per cent for girls aged 14 -15 (Sauma, 2008). Schady and Araujo (2006) support Parker and Skoufias (2000) and claim that beneficiary children in Equator are less likely to work compared to nonbeneficiaries. There has been a 10 per cent increase in schooling rate with a 17 per cent reduction in child labor.

CCT programs in Turkey target the poorest 6 per cent of population. The program aims to increase beneficiary children's school attendance rates and decrease drop-out rates in addition to achieve academic success. Moreover, health component of CCT programs aim to increase vaccination rates, and provide health care services. The existing impact analysis reports (SYDGM &IFPRI, 2006) reveal that there are methodological, technical and physical limitations. They report that beneficiaries have limited information concerning the program. They especially have no or little information about the application and acceptance criteria. There has been a strong focus on gender. In addition to an increase in the enrollment of girls in Mexico and Nicaragua, a positive effect on attitudes toward girls' education has been observed. In Southeastern Anatolia in Turkey, the socio-cultural prejudices against girls education are still stronger than cash incentives. Hence complementary policies are needed to eliminate socio-cultural barriers for girls' empowerment. Since CCT programs are generally aimed at women, the status of women at home has been improved (Last, 2009).

The impact analysis report CCT (2006) claims that the program had been successful in reaching the targeted population and resulted in an improvement of income distribution. Even though there appeared to be a 1.3 points increase in primary school enrollment rates, RDD (Regression Discontinuity Design) results indicated much more modest increases. Moreover, there is no evidence in favor of an increase in secondary school enrollment rates. However, empirical analyses indicate that there has been a 10.7 per cent increase in girls' enrollment rates in secondary school and a 5 per cent increase in girls' attendance. Additionally there has been an improvement in academic success of children (SYDGM &IFPRI, 2006). Regarding health care transfers, there has been a 13.6 per cent increase in vaccination rates (SYDGM &IFPRI, 2006).

Policymakers may face many obstacles and choices while implementing such an effective social program. While conditionality increases the effectiveness of the program, targeting and monitoring may lead to increases in cost per beneficiary. That in turn undermines the effectiveness of the program. A weak program without any targeting mechanism, on the other hand, lowers the cost per beneficiary; but may transfer funds to those who are not poor, impairing the efficiency of the program (Son, 2008). There may be some limitations of targeting mechanism that has been used in Turkey at the moment. It is subjective and rigid, without any recognition of regional differences.

Some of the local solidarity fund officials realizing this fact opted to use their own targeting mechanisms. In order to be effective, CCT programs may need to be accompanied by alternative social policies which stimulate supply of services.

Overall the CCT program implemented in Turkey is not considered to be result– oriented. Besides, the targeting mechanism cannot be modified in case there are improvements in economic wellbeing of the beneficiaries. That is the transferred amount remains the same even if there is a progress in the family income. Additionally, there is a need for a continuous monitoring and evaluation mechanism for CCT program.

- As mentioned above, CCT programs have a dual objective: to alleviate poverty in the short term and to invest in human capital of children in the long term. Thus the long term vicious circle of poverty could be broken.
- The short term economic objectives include reductions in poverty, increase in consumption (more nutritious goods), improvements in the household spending and diminishing child labor. Impact assessment analyses indicate that improvements are positively correlated with the amount of transfers (For Nikaragua, Maluacio, 2008). Besides, CCT programs in Brasil, Mexico, Honduras and Colombia lead to 7- 10 per cent improvements in economic wellbeing of the beneficiaries (Fiszbein et al., 2009). The long term objective of the program is the permanent improvement in the family wellbeing coupled with an increase in family savings, so that they may cope by themselves when the transfers are not provided. However, evidence regarding the long term impacts is limited. Yet Behram et al.(2005) report that there has been an increase in savings of Mexican beneficiaries, especially in agriculture and livestock (Behram et al., 2005).
- The second main objective of the CCT programs covers the education and health components of the program. The short term health objectives include improvements in the access to health care services, improvements in child nutrition and vaccination rates. Impact analysis report that there have been improvements in demand for health care services (Attanasio et al., 2005; Rawlings and Rubio, 2005). The short term education objectives include improvements in school enrollment, school attendance and academic success. Additionally there have been attempts to reduce gender gap in schooling ratios. Impact analysis studies reveal that positive outcomes are observed in countries where pre-program schooling indicators were poor. Overall impact assessment analysis shows that short term objectives are generally met.
- When the long term objectives are considered, the improvements in nutrition status of children is reflected in improvements in height and weight of children in their age groups, diminished child and infant mortality rates, improvements in cognitive abilities and school attendance. However long term impact assessment analyses have not been successful in unveiling the positive impact of CCT programs.

The CCT program in Turkey employs a targeting mechanism that is based on a means testing approach. Compared to other countries' systems, targeting mechanism in Turkey can be considered to be more appropriate. But improvements can be obtained regarding the following issues:

- Even though the beneficiaries are determined in employing a means testing methodology, the executive board of local fund has the final say. There is a need for an objective scoring methodology which takes geographical differences into account.
- There are many institutions and municipalities that make transfers to poor in order to alleviate poverty. In that case a beneficiary of government funds may also get transfers from municipalities and other institutions. To realize a fair distribution of scarce resources to the poor all transfer efforts should be coordinated from one central organization.
- Sticking to one policy or transfer mechanism in the fight against poverty may not guarantee success. Rather, alternative complementary policies should be simultaneously implemented. Furthermore empirical research reveals that there is a strong link between migration and poverty. Individuals who cannot find employment in rural areas generally migrate to urban areas with the hope of finding a job. As the employment opportunities for unskilled, less educated migrants are limited, they tend resort to social transfers to cope with poverty. Thus in addition to transfer programs, employment creation efforts, especially for women, are also required for alleviating poverty.
- The precondition for applying for transfers is the absence of social security. Yet having even one person with social security in one family does not mean that they do not need assistance. Hence the precondition for receiving social assistance should be reconsidered.
- Social transfers in Turkey do not seem to be sensitive to economic crisis and fluctuations both in terms of magnitude and coverage. It is important for beneficiaries in hard times that they can rely on transfers. Thus measures should be taken in times of recession and crisis to accommodate the increased number of applications.
- The structure of targeting mechanisms is different for each country. The transfers are unconditional in some countries, while others introduce some kind of conditionality in order to stimulate demand for health and education services. Furthermore in kind consumption transfers are being granted in countries such as Bangladesh where poverty is at considerably high level. General Directorate in Turkey also provides in kind transfers in addition to CCTs, which directly impact consumption levels of poor families, leading to improvements in nutrition of children.
- One of the strongest points of the program in Turkey is that the transfers are directly provided to women, which in turn contribute to the empowerment of women in the family. Compared to men, women tend to spend the additional income on their children, especially for consumption and education purposes.

3. Inequality in Opportunities and Poverty in Turkey

The Social Assistance and Solidarity Fund, founded in 1986, aims to carry out nation-wide poverty reduction programmes and provide assistance to vulnerable people through Local Social Assistance and Solidarity Foundations. The quasi non-governmental Social Assistance and Solidarity Foundations (SASF) were established in each province and district centre in parallel with the establishment of a General Secretariat to coordinate the Fund activities and manage resources at the central level. In response to the growing need for a specialized institution and staff and to enhance efficient use

of the Fund resources, the General Secretariat was re-organized as General Directorate of Social Assistance and Solidarity (GDSAS) that reports to Prime Ministry in 2004. In 2011, GDSAS was affiliated to the recently-established Ministry of Family and Social Policies and it has been re-organized as the General Directorate of Social Assistance. General Directorate of Social Assistance implements nation-wide benefit and poverty reduction programmes using SASF resources.

Approximately 2.5 million households benefit from social assistance and projects support programmes of GDSA, annually. While 85 per cent of these benefits are provided in-cash, the rest is delivered in-kind. Even though there has been a steady rise in total social protection expenditures out of GDP, it accounts approximately 17 per cent of GDP in 2011 according to recent OECD figures, which is quite low in comparison with the member countries of the EU. In some European countries, like France and Sweden, the ratio is 25-30 percent, and the average for the OECD countries is 19.3 percent (OECD Social Expenditure Statistics). In spite of the fact that social protection expenditures have increased, public expenditure on welfare and combating poverty has been modest. The Annual Program for 2012 puts the ratio of total public social assistance payments to GDP at 1.18 percent as of 2010, compared to 1.37 percent in 2009 and 1.03 percent in 2008[1].

According to the Turkish Statistical Institute's (TUIK) "Income and Life Conditions Research, 2010", 16.9% of the population lives below the poverty line. Even though poverty rate declines continually since 2003, income inequality is still an important issue as the top percentile receives 46.4 per cent of total income while the bottom group obtains only 5.8 per cent of total income. According to the results of Poverty Study based on 2009 Household Budget Survey, 0.48 per cent of the people live below the food poverty line, whereas 18.08 per cent live below the complete poverty line. While the poverty rate for individuals illiterate or literate without any degree is 29.84%, the rate is only 0.71% for those whose education level is university or higher. Moreover the poverty rate is 9.65% for the households which are comprised of 3-4 members, whereas the poverty rate is 40.05% for the households whose size is 7 or more. The ratio of individuals who live in rural areas and live below the complete poverty line is 38.69%, whereas the ratio of individuals who live in urban areas and live below the complete poverty line is 8.86% (TUIK,2011). According to the recent TUIK reports, the poverty rate for Turkey is 0.21 per cent with US Dollar 2.15 (PPP) per capita daily limit. However, if the daily poverty limit is accepted as 4.30 US Dollar (PPP) per capita, poverty rate reaches 3.66 per cent in 2010.

The poverty reports suggest that there is a direct relationship between poverty and educational status and gender. There are twice as many women as men who were illiterate in the poor group. Additionally people who live in an extended family in rural parts of Turkey have a higher likelihood of being in poverty compared to those who live in urban areas as a nuclear family. Poor people in Turkey have lower educational status, are likely to be women, lack social and health insurance, and work informally in the agricultural sector as family workers (Dansuk, 1997; Saatci & Akpinar, 2007). Hence there is a significant association between social exclusion and poverty in Turkey. People who live in rural areas, in extended families and usually work as family labor force have limited or no access to education and health facilities, which in turn contributes to their poverty prevailing generations.

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1 http://www.unicef.org.tr/en/content/detail/52/appendix-budget-for-social-protection-2.html.

Hentschel et al. (2010) argue that wealth and measured circumstances are closely related in Turkey. They state that 85 per cent of women in the least wealthy households are born in rural areas whereas this holds for only 20 per cent of women who live in a wealthy household. Moreover there is a direct relationship between parental education and wealth: as the level of parental education increases so does wealth. Additionally regional differences of birth place also affect the wealth status. People born in urban and Western Turkey are more likely to be wealthier than those born in rural and Eastern Turkey. Overall, Hentschel et al. (2010) find that at least one third of the wealth disparity in Turkey can be explained by inequalities in opportunity. Likewise, Ferreira et al. (2011) explore the opportunity profile for Turkey, constructed by ranking household types by chosen valuation of their opportunity sets: mean imputed consumption. Empirical analysis reveals that the bottom 10% of the distribution is 88% rural and 96% Eastern by birth. Moreover, around 70 per cent of them have six or more siblings, in addition to low parental education levels.

The inequalities with respect to wealth, unequal opportunities and hence social exclusion, are reflected in education and health outcomes of children. The disadvantaged groups, especially the children, have limited access to health and education services, which in turn contributes to their exclusion from the society in addition to poverty. Consequently in order to break the vicious circle of poverty, the children in the most vulnerable segment, belonging to the poorest 6 per cent of the population, have been targeted. CCTs are provided to poor families who cannot afford the basic health and education needs of their children.

The CCT program in Turkey has three main components, health, education and pregnancy care support. The conditional education grants are provided to the children of the target group conditional on school enrolment, from the first through the end of the twelfth grade. Once qualified as beneficiaries, children should realize at least 80 per cent attendance rate to continue to receive the grant. The grants are higher for girls in order to encourage families to educate their daughters. According to 2011 figures, a primary school student boy receives nearly 15 US Dollars per month, whereas a primary school student girl gets nearly 20 US Dollar as conditional transfers. For secondary school students the grants are 25 US Dollars and 30 US Dollars for boys and girls, respectively. The health support is provided for the children aged between 0-6 and is approximately 15 US dollars per month. The health support is conditional on regular visits to health care center and the completion of vaccinations. Moreover, as of January 2005 health support for pregnant women is also provided by the SASF, which is conditional upon regular health center visits of pregnant women, encouraging in–hospital deliveries.

These efforts have been reflected via improvements in health and education indicators since the introduction of the CCT program. According to the Ministry of Health statistics, there has been a steady increase in average number of follow-up for infants, children and pregnant women (Figure 1). Similarly infant, neonatal and post-neonatal mortality rates also exhibit a downward trend (Figure 2). Moreover the maternal mortality rate decreased from 70 per 100000 live births in 1998 to 16.4 per 100000 live births in 2010. Additionally the vaccination rates for DaBT1, DaBT2, BCG, HBV3, MMR and CPV3 have almost reached to 98 percent. The hospital birth ratio increased from

78 per cent in 2003 to 92 per cent in 2010. The most dramatic rise, from 54 per cent in 2003 to 82 per cent in 2010, has been observed in the scope of antenatal care (minimum four visits to the health care center) (SBSİY, 2010). The improvements in the pregnancy health care have also been reflected in the increases in the share of Cesarean sections in all births from 21 per cent in 2003 to 46 per cent in 2010. Additionally education indicators provided by Ministry of Education reveal that school enrollment rates exhibits an increasing trend (Figures 3 and 4).

Although there have been inequalities in opportunities, coupled with a considerable degree of poverty in Turkey, efforts have been directed to root causes of poverty. Social assistance policies aimed at disadvantaged groups are being developed. Among them conditional health and education transfers constitute an important tool aiming to enhance human capital accumulation, by emphasizing the social inclusion. The health and education indicators give support to the success of conditional health and education transfers. Next section provides a qualitative analysis regarding the effects of conditional transfers.

Figure 1. Average Number of Follow-ups
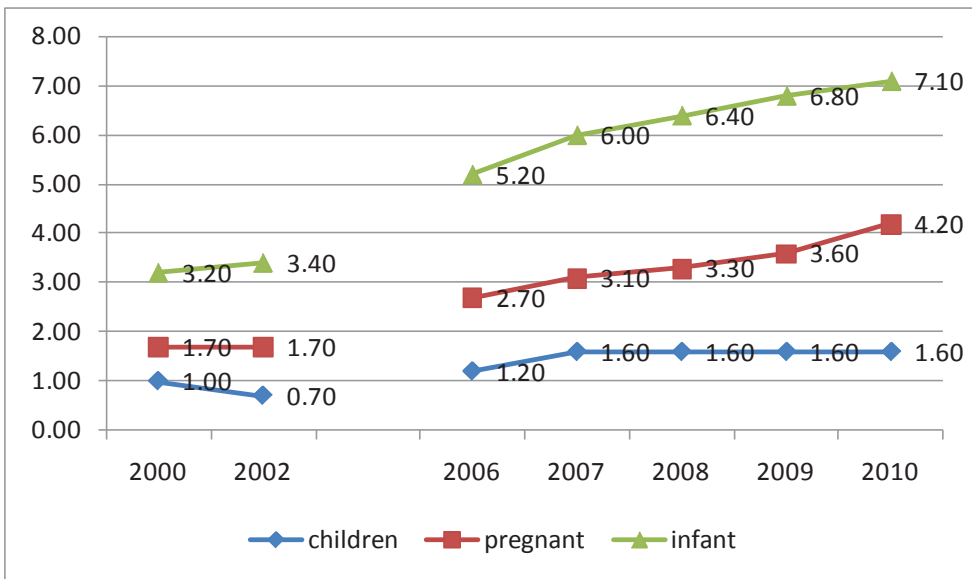
Figure 2. Mortality Rates[*]
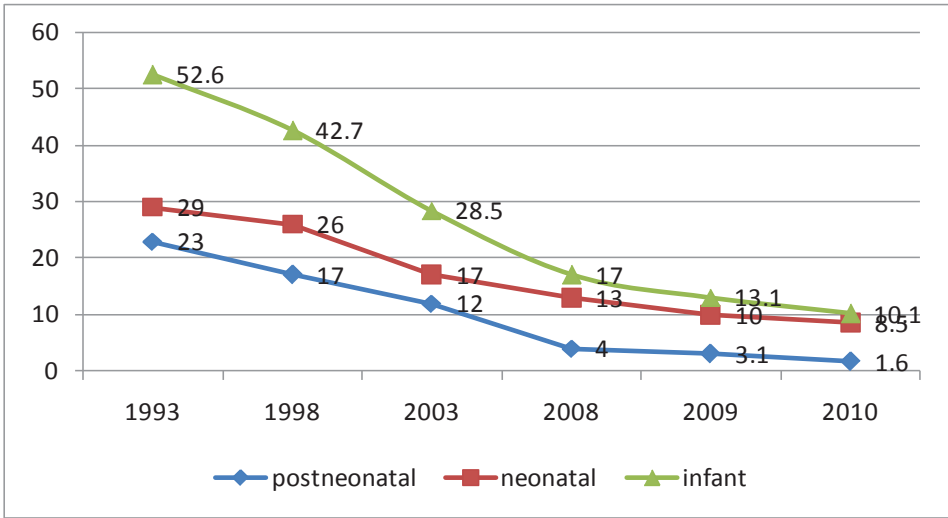
* Per thousand

Figure 3. Net School Enrollment Rates for Primary Education
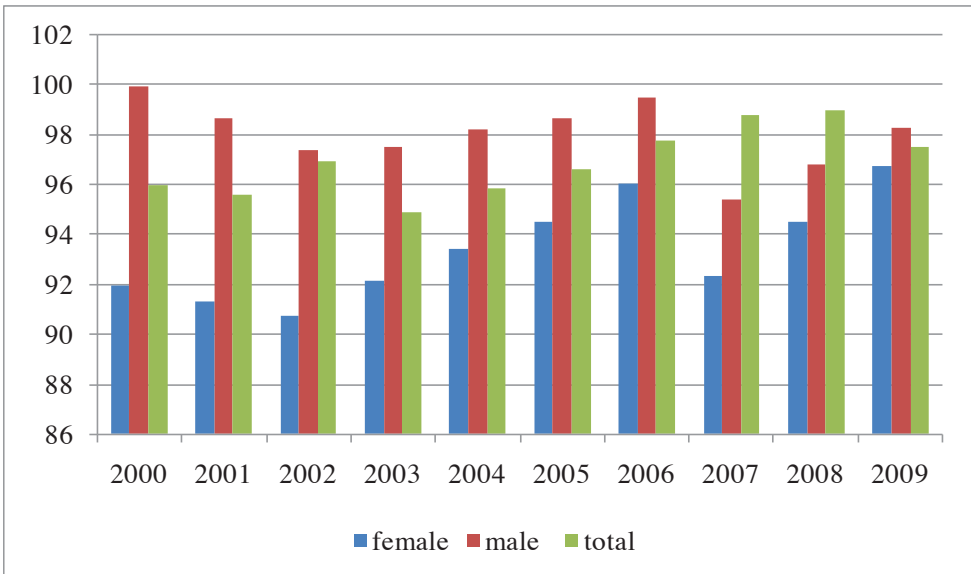
Figure 4. Net School Enrollment Rates for Secondary Education
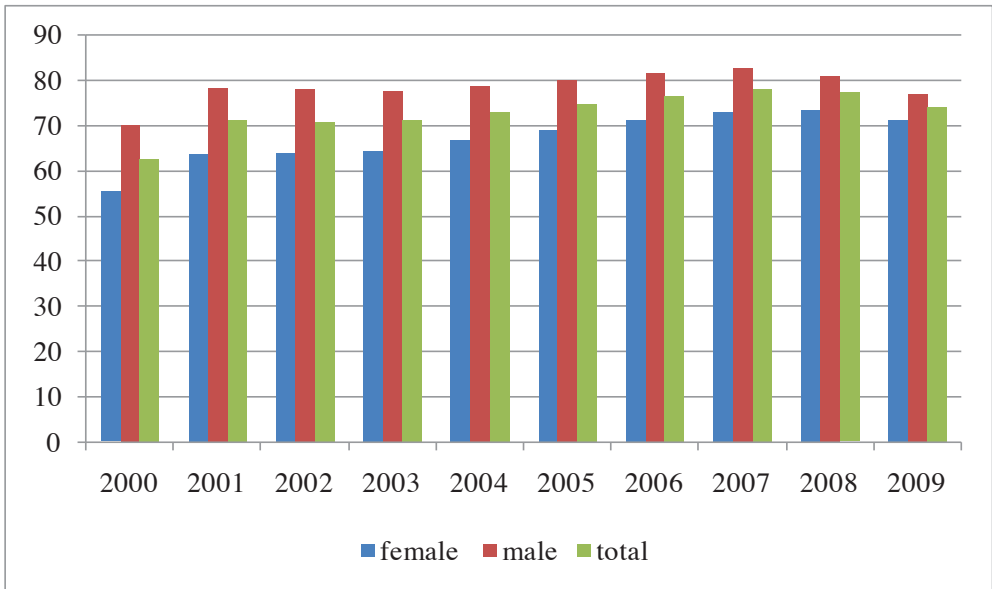
4. Methodology

4.1. Impact Evaluation Methods: Overview[2]

The impact evaluation studies examining the effect of an intervention on final welfare outcomes establishes whether the intervention had a welfare effect on individuals, households, and communities, and whether this effect can be attributed to the concerned intervention. In general, impact evaluations can be classified into two approaches: quantitative approach and qualitative approach. The basic organizing principle of quantitative impact evaluation is the use of an explicit counterfactual analysis in order to isolate the welfare effect of a specific project or policy by comparing the actual observed outcomes of project participants with counterfactual outcomes, i.e., the hypothetical outcomes that would have prevailed in the absence of the project. Since people are either in or not in the project and cannot be both, these hypothetical counterfactual outcomes cannot be observed. The central objective of quantitative impact evaluation is to estimate these unobserved counterfactual outcomes.

The importance of counterfactual analysis stems from the need to avoid biases in estimating project impacts. One technique frequently used in evaluating development interventions is comparing "before" and "after" outcomes. The problem of this comparison is that it uses the same group of individuals (i.e., project participants) and observes the temporal change in outcome of this group. This approach may lead to a potentially biased measure of the project impact because such a com-

2 This section is heavily based on "Impact Evaluation Methodological and Operational Issues", Asian Development Bank, September 2006.

parison fails to account for the changes in outcome that happen with the project participants anyway even without the project. Simply speaking, if one compares one's income between times T0 and T1, the difference in income is due partly to one's benefit from the project and partly to one's income change caused by regular changes in the economy in general, even if one did not participate in the project.

Another frequently used technique is comparing the outcomes between a group with the project and a group without the project. Even though efforts have been made to make the "with" and "without" groups similar, these two groups are only similar in a general sense and there is no guarantee that they are identical or close to identical. Because participating in the project self-selects participants and nonparticipants, making the two groups different. For example, in a micro-enterprise finance program, borrowers and nonborrowers may differ in entrepreneurial capability or willingness to take risk, even if they seem similar in any other observable ways. Because of this failure to control for unobservable differences between the "with" and "without" groups, the estimated impact can be biased. Qualitative impact evaluation does not use a counterfactual analysis but relies on understanding processes (i.e., if A is done, then likely B will occur, and then likely C will occur, etc.); observing behaviors (e.g., consumptions, visits to hospital); and condition changes (e.g., school conditions, irrigation canals).This type of evaluation usually draws inferences from studies like reviewing project implementation processes, interviewing project beneficiaries to get personal opinions, conducting focus group discussions, and analyzing supportive secondary data, etc.

While qualitative evaluations build stories and provide contextual insights to what is happening with the project, they often are being criticized for lacking rigor and internal validity. Major critics of this evaluation approach revolve around issues such as subjectivity in data, lack of a reliable comparison group, and lack of statistical robustness often due to small sample sizes. Quantitative impact evaluations using explicit counterfactual analyses of data from well-designed statistically representative samples are better suited for inferring causal relationships between the program and outcomes. However, there is increasing acceptance that qualitative methods can provide critical insights into the program context and in-depth explanations to the results observed in a quantitative analysis. For this reason, good impact evaluations often combine both quantitative and qualitative methods to the extent possible.

4.2. Study Design

This impact evaluation analysis employs both qualitative and quantitative methods *(triangulation method)*.This method allows researchers to use a wide range of data, leading to more reliable inferences at the end of the analysis, whereby both qualitative and quantitative methods lending support to each others' findings (Brewer &Hunter, 1989; Creswell 1995).

In order to evaluate the impact of conditional cash transfer programs in Turkey a questionnaire has been developed. The pilot study aimed to reach a total of 60 households in Ankara Province; 42 families in Keçiören and 18 in Bala districts. During 14-17 December 2010.49 households have been reached. The treatment group contained 16 families and the control group contained 33 fami-

lies. Questionnaires have been conducted face to face by experienced researchers. The questionnaire had been revised and improved following a pilot study. Then two separate surveys had been undertaken in 2011 and 2012. Additionally a qualitative research has also been conducted at the same time with the initial survey, covering beneficiaries, applicants to the CCT programs, healthcare workers, school teachers, school principal, administrators and Fund officials. The aim of the qualitative analysis has been to obtain an in-depth profile of the applicants, as well as to learn more about the experience and opinions of third parties such as government and local officials who have been involved with the CCT program implementation.

The general method used in quantitative analysis was a quasi-experimental approach using a difference in difference calculation of effects and impacts attributable to conditional cash transfer program implemented in Turkey. In this approach changes over time in an indicator are calculated for a treatment group, and the change in the treatment group net of the change in control group is attributed to the intervention. In the first part of the analysis a pre-test/post-test comparison group design was used with the families in the comparator groups selected from municipalities ineligible to participate in the program. The treatment group on the other hand was selected from the beneficiaries. The questionnaire has been applied to both groups in March–April 2011 and one year following the initial survey. Families were interviewed at the start of the program and at several points during implementation, avoiding problems of linear extrapolation when only one post-test measurement is made. Figure 5 presents the study design, where A=Do-Ko presents the initial data sets of treatment and control groups. The comparatively higher value Do is attributed to targeting methods of the CCT programs. C=Do-D1 presents the expected change in treatment group after one year of acceptance to the program. B=D1-KA1 on the other hand presents the expected change for the treatment group -control group difference. Since we do not have the initial data for both groups, the research has been designed according to the regression discontinuity design principles (RDD). It has been assumed that targeting mechanism for eligibility for CCT program is valid and reliable and there are observable and unobservable differences between the two groups at the initial reference point. The second phase of the study covers a cross sectional study of the academic performance, attendance and school dropout rates belonging to the children of the beneficiary families. The data is obtained from Ministry of National Education (MoNE) e-school database. Finally, at the third phase a comparative assessment is made concerning the impact of conditional cash transfers.

Figure 5. Study Design

D: Treatment group
Do: Treatment group initial data
D1: Treatment group follow – up data
K: Control group
Ko: Control group initial data
KA1: Data obtained after the introduction of the control group to the program
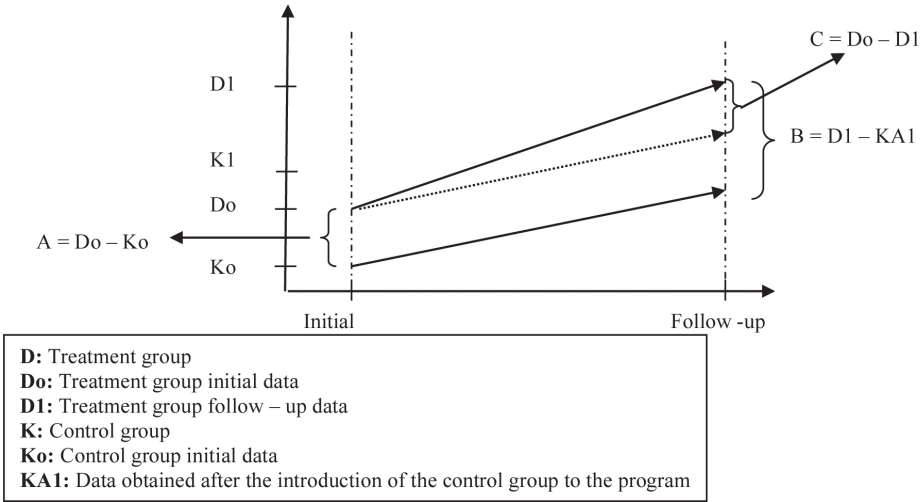
5. General Profile of the Households

5.1. Sampling

A stratified random sampling procedure was followed, with two stages of stratification, Turkey rural – urban and NUTS 1, 12 regions. The questionnaire has been applied to both treatment and control groups at the initial time March-April 2011 and one year following the initial survey, covering 10.797 and 8.752 applicants at the first stage and second stage, respectively. The realization rates were 74 per cent and 69 per cent, for the first survey and second survey, respectively. The main reason for the decrease in the realization rate could be high mobility of targeted group as they tend to move whenever and wherever they find an employment opportunity. Families were interviewed at the start of the program and at several points during implementation, avoiding problems of linear extrapolation when only one post-test measurement is made. Table 1 and Table 2 present sampling distribution of treatment and control groups, respectively, for both surveys. For both surveys, nearly 80 per cent of population in Central Anatolia lives in rural areas, which constitute the highest rural residency, whereas there is no rural residency in İstanbul. The examination of the sampling distribution reveals that the greatest share for rural areas belong to Central Anatolia region in the treatment group. Regarding the urban treatment group, Western Anatolia region has the greatest share while Central Anatolia region has the smallest share.

Table 1. NUTS 1 Level Sampling Distribution: Treatment Group

	First Survey				Second Survey			
	Rural		Urban		Rural		Urban	
	n	%	*n*	%	*n*	%	*n*	%
İstanbul	-	-	164	100.0	-	-	133	100.0
Western Marmara	85	39.0	133	61.0	61	34.9	114	65.1
Aegean	229	37.4	384	62.6	174	36.5	303	63.5
Eastern Marmara	139	38.4	223	61.6	113	38.8	178	61.2
Western Anatolia	133	29.2	322	70.8	117	27.9	303	72.1
Mediterranean	190	30.3	438	69.7	137	28.1	350	71.9
Central Anatolia	197	77.3	58	22.7	145	76.3	45	23.7
Western Blacksea	265	57.0	200	43.0	210	55.0	172	45.0
Eastern Blacksea	171	62.9	101	37.1	134	62.9	79	37.1
Northeastern Anatolia	267	57.4	198	42.6	228	58.6	161	41.4
Centraleastern Anatolia	400	68.4	185	31.6	251	67.1	123	32.9
Southeastern Anatolia	462	43.2	607	56.8	376	43.8	483	56.2
Total	2538	45.7	3013	54.3	1946	44.3	2444	55.7

Table 2.NUTS 1 Level Sampling Distribution: Control Group

	First Survey				Second Survey			
	Rural		Urban		Rural		Urban	
	n	%	*n*	%	*n*	%	*n*	%
İstanbul	-	-	276	100.0	-	-	218	100.0
Western Marmara	115	76.2	36	23.8	100	76.3	31	23.7
Aegean	226	35.6	408	64.4	174	34.0	338	66.0
Eastern Marmara	68	27.3	181	72.7	57	28.9	140	71.1
Western Anatolia	160	14.1	974	85.9	149	14.3	895	85.7
Mediterranean	172	39.7	261	60.3	126	38.2	204	61.8
Central Anatolia	164	82.0	36	18.0	124	80.0	31	20.0
Western Blacksea	242	36.2	427	63.8	192	34.3	367	65.7
Eastern Blacksea	205	60.7	133	39.3	170	60.5	111	39.5
Northeastern Anatolia	187	82.4	40	17.6	168	87.0	25	13.0
Centraleastern Anatolia	239	58.3	171	41.7	188	60.6	122	39.4
Southeastern Anatolia	183	34.9	342	65.1	155	35.9	277	64.1
Total	1961	37.4	3285	62.6	1603	36.7	2759	63.3

5.2. Demographic Profile

Demographic analysis of the households covered in both survey reveals that the majority of the respondents are female in the 26-35 years of age (nearly 95 per cent). Most of them are graduates of primary school, living with their spouses and have at least 3 children. The family size is larger in rural areas compared to the urban areas. Additionally, Western Blacksea and Southeastern Anatolia regions have a larger family size than rest of the regions. Overall the number of disabled people is below 0.5 per household, without any significant difference between rural and urban areas. It appears

that migration is not an issue for the respondents. Generally people migrate from rural to urban areas; from small villages and towns to large metropolis. The largest immigrant-receiving regions are İstanbul, Aegean and Mediterranean Regions. The majority of immigrants to these regions are originally from Eastern regions. The main reason for migration is financial difficulties faced at the home region and the hope to find an employment to earn a decent living. At the same time, there are people who migrated because of health, education and family related reasons. When the social networks are examined to see if there is any solidarity in fight against poverty, it emerged that nearly 95 per cent of all respondents do not receive any financial and / or in-kind support from their extended families or relatives. The minority who receives support express that they mainly get in-kind help from their relatives who live in their hometowns, such as semi durable foods.

When the type of housing is considered it emerges that nearly one third of the respondents own their houses; one third do not pay any rent; however the remaining one third pay rents for housing. The highest rent paid belongs to İstanbul and Western Marmara regions; whereas the lowest rent belong to Eastern regions. The families that need to pay rent generally receive rent support from the General Directorate, especially in the Central and Eastern Regions.

Nearly 90 per cent of the households have children under the age of 18, the highest number belonging to the South Eastern Anatolia, where 5 per cent of children work, even though the majority of the children in the sample do not work. Those children who are working are generally part time employed at holidays. Almost all of the respondents agree that all children, especially girls, should continue their education and graduate university if possible.

Demographic profile of the respondents of treatment and control groups is summarized in Table 3. The average household size is very close to each other, but little higher than the country average which was 4.50 at the 2000 household budget survey. The ratio of disabled person in the household is also above the country average of 12.29 percent. The ratio of unemployed and unsecured people is also quite high. Other than the disabled ratio there is not any statistically significant difference between the treatment and control groups at 5 per cent level of significance.

Table 3. Demographic Profile Turkey

	Treatment	Control	p value
Average household size	4.817	4.755	0.000*
Ratio of disabled	0.149	0.143	0.126
Without social security	0.888	0.850	0.000*
Unemployed	0.943	0.930	0.000*
*Statistically significant at 5 percent level of significance.			

Table 4 presents the demographics related to the working life perceptions of the respondents. The surprising observation is that the child labor ratio in both the treatment and the control groups are below the Turkey average of 5.9 per cent. This could be due to the fact that these families prefer their children to have education in order to be eligible for CCT programs. Migration rate is above the national average of 2.47 per cent for 2009-2010 period. But the migration rate for the control group is higher than that of the treatment group.

Almost all of the respondents are in favor of education for their children, and generally support female employment.

Table 4. Migration, Child Labor and Employment

	Treatment	Control	p value
Migration rate	0.214	0.311	0.000*
Employment ratio of below 18 years of age	0.027	0.025	0.489
Support Female Employment	0.875	0.906	0.000*
Support Girls' Education	0.990	0.993	0.171
Support Boys' Education	0.996	0.998	0.028
*Statistically significant at 5 percent level of significance.			

Table 5. Demographics

	First Survey				Second Survey			
	n	%	*n*	%	*n*	%	*n*	%
Gender								
Female	5303	95.5	4175	95.1	4983	95.1	4176	95.7
Male	248	4.5	215	4.9	263	5.0	186	4.3
Age								
18-25	1197	21.6	686	15.6	847	16.1	609	14.0
26-35	2159	38.9	1834	41.8	2205	42.0	1726	39.6
36-45	1359	24.5	1198	27.3	1535	29.3	1311	30.1
46-60	762	13.7	608	13.8	605	11.5	655	15.0
61 and over	74	1.3	64	1.5	54	1.0	61	1.4
Marital Status								
Single	218	3.9	78	1.8	278	5.3	64	1.5
Married	4681	84.3	3791	86.4	4337	82.7	3746	85.9
Widow	212	3.8	153	3.5	172	3.3	162	3.7
Divorced	271	4.9	219	5.0	280	5.3	235	5.4
Separated	43	0.8	39	0.9	47	0.9	39	0.9
Married (spouse in jail)	53	1.0	45	1.0	39	0.7	38	0.9
Married (spouse in military service)	11	0.2	7	0.2	6	0.1	3	0.1
Married (working away from home)	15	0.3	18	0.4	36	0.7	25	0.6
Married but living separate	47	0.8	40	0.9	51	1.0	50	1.1
Education								
Illiterate	1556	28.0	997	22.7	938	17.8	955	21.9
Literate	432	7.8	354	8.1	603	11.5	327	7.5
Primary school (5 years) graduate	2698	48.6	2317	52.8	2832	54.0	2343	53.7
Primary school (5 years)	14	0.3	9	0.2	8	0.2	11	0.3
Primary school (5 years) drop-out	157	2.8	134	3.1	164	3.1	136	3.1
Primary school (8 years)	446	8.0	346	7.9	391	7.5	341	7.8
High school drop-out	63	1.1	54	1.2	72	1.4	63	1.4
High school	175	3.2	161	3.7	229	4.4	182	4.2
University drop-out	7	0.1	10	0.2	8	0.2	2	0.0
University graduate	2	0.0	2	0.0	2	0.0	2	0.0
Total	5551	100.0	4390	100.0	5246	100.0	4362	100.0

Table 6. Treatment Group Average Household Size

	First Survey			Second Survey		
	Rural	Urban	Total	Rural	Urban	Total
İstanbul		5.0	4.9		4.9	4.9
Western Marmara	3.9	3.9	3.9	4.9	4.9	4.9
Aegean	4.1	4.4	4.3	4.6	5.2	5.0
Eastern Marmara	4.7	4.5	4.6	4.3	4.4	4.3
Western Anatolia	4.0	4.4	4.3	4.0	4.3	4.2
Mediterranean	4.3	4.5	4.4	4.8	4.8	4.8
Central Anatolia	4.0	3.7	3.9	4.8	4.2	4.6
Western Blacksea	5.5	5.1	5.3	4.4	4.6	4.5
Eastern Blacksea	4.7	4.4	4.6	4.9	4.6	4.8
Northeastern Anatolia	4.6	4.9	4.7	4.8	5.0	4.9
Centraleastern Anatolia	4.0	4.5	4.2	4.9	4.6	4.8
Southeastern Anatolia	5.3	5.1	5.2	4.5	4.8	4.7
Total	4.6	4.6	4.6	4.6	4.7	4.7

Table 7. Control Group Average Household Size

	First Survey			Second Survey		
	Rural	Urban	Total	Rural	Urban	Total
İstanbul		5.1	4.6		4.8	4.8
Western Marmara	4.7	4.0	4.5	4.4	4.4	4.4
Aegean	4.7	4.3	4.4	4.3	4.8	4.6
Eastern Marmara	4.5	4.5	4.5	4.9	4.7	4.8
Western Anatolia	4.5	4.4	4.5	4.5	4.4	4.4
Mediterranean	4.6	4.7	4.7	4.9	4.8	4.8
Central Anatolia	4.0	4.6	4.1	4.8	4.6	4.7
Western Blacksea	5.1	4.4	4.7	4.4	4.8	4.6
Eastern Blacksea	5.0	4.5	4.8	5.0	4.5	4.8
Northeastern Anatolia	4.9	4.6	4.8	4.7	5.6	4.8
Centraleastern Anatolia	4.8	4.7	4.8	5.2	4.7	5.0
Southeastern Anatolia	5.2	4.9	5.0	4.7	4.5	4.6
Total	4.8	4.6	4.7	4.7	4.6	4.6

5.3. Assessment of Application Process

The awareness about the CCT programs is also investigated (Table 8). It appears that the level of awareness regarding the structure of the CCT program is generally low in both treatment and control groups. However except for the objectives of transfers, the awareness is higher in the treatment group. The ratio of those who believe that the targeting mechanism is fair is above 60 per cent for both groups. For each item there is not a statistically significant difference between the two groups.

Table 8. Awareness about CCT Program

Ratio of those who believe / know	Treatment	Control	p value
The objective of transfers	0.400	0.606	0.000*
Increase in education transfers from primary to secondary school level	0.365	0.302	0.000*
Higher transfers for girls	0.478	0.375	0.000*
Targeting mechanism is fair.	0.672	0.647	0.000*
*Statistically significant at 5 percent level of significance.			

Nearly 40 percent of the households report that they have been informed about CCT programs by their neighbors. Almost all of the applicants obtained the application form from the local Fund centers. In the first survey, more than half of the applicants expressed that they had filled the application form by themselves. However in the second survey this percentage increased up to 66 percent. The main reason for not filling the application form by themselves has been being unable to understand the questions in the application form. For the treatment group the number of people who fully understand the questions increased from 26.8 per cent in the first survey to 51.6 per cent in the second survey. This reflects that they had gathered more information about the CCT program and the application process. In the first survey almost half of the respondents did not have any information about the CCT programs and the application process. In the second survey, however, only one third of the respondents did not have any information about these issues. The applicants mostly believe that officials at the headquarters of the fund make decisions regarding the determination of the beneficiaries.

Table 9. Where Did You Get The Information about The CCT Program?

	First Survey		Second Survey	
	Treatment	Control	Treatment	Control
	%	%	%	%
Neighbors	40.3	40.6	39.3	33.9
Relatives	20.5	16.3	24.7	28.7
Fund personnel	16.4	14.2	14.2	16.3
School / teacher	14.3	11.6	10.7	9.4
Demarche	12.6	11.2	8.5	7.6
Friends	9.2	10.0	7.0	7.6
Health center	3.1	2.6	2.1	1.9
Fellow villagers	1.9	2.2	1.8	1.6
Media	1.2	1.0	1.6	1.6
Other	1.9	3.6	1.3	1.1

Table 10. Did You Understand All of the Questions in the Application Form?

	First Survey						Second Survey					
	Treatment			Control			Treatment			Control		
	All	Some	None	All	Some	None	All	Some	None	All	Some	None
İstanbul	19.2	55.2	25.5	39.4	51.9	8.7	38.5	42.7	18.8	45.0	37.1	17.8
Western Marmara	28.3	37.1	34.6	23.7	39.9	36.4	20.0	37.7	42.3	36.1	58.7	5.3
Aegean	28.9	60.8	10.3	24.5	62.9	12.6	33.1	50.8	16.1	35.9	51.6	12.5
Eastern Marmara	46.6	26.2	27.2	49.8	31.3	18.9	34.3	61.2	4.5	30.9	61.4	7.7
Western Anatolia	37.2	42.7	20.1	38.4	39.0	22.6	44.9	50.0	5.2	46.0	46.2	7.8
Mediterranean	29.1	46.6	24.3	39.6	47.2	13.2	47.3	43.3	9.4	50.7	42.0	7.3
Central Anatolia	25.1	43.5	31.4	27.8	51.1	21.1	33.4	51.2	15.3	21.9	53.3	24.8
Western Blacksea	34.6	43.9	21.5	48.1	35.0	16.9	29.7	64.0	6.3	32.2	59.5	8.4
Eastern Blacksea	42.6	40.9	16.6	43.5	36.7	19.9	27.9	53.6	18.5	28.4	47.6	24.0
Northeastern Anatolia	14.0	81.3	4.7	10.9	83.9	5.2	18.5	61.2	20.3	26.6	58.2	15.2
Centraleastern Anatolia	21.3	62.7	16.0	22.2	54.7	23.2	33.7	56.7	9.7	25.5	60.3	14.2
Southeastern Anatolia	23.0	53.8	23.1	28.4	51.0	20.6	41.2	48.0	10.7	24.3	65.0	10.7
Total	26.8	53.8	19.4	35.3	46.7	18.0	36.6	51.6	11.9	36.4	52.6	11.1

Table 11. Do Youhave Information about CCT Application and Assessment Process?

	First Survey						Second Survey					
	Treatment			Control			Treatment			Control		
	No	Little	Yes	No	Little	Yes	No	Little	Yes	No	Little	Yes
İstanbul	74.9	22.0	3.1	55.0	39.8	5.1	33.1	63.8	3.1	42.7	52.3	5.0
Western Marmara	74.3	23.5	2.2	86.3	9.9	3.8	58.7	37.8	3.5	31.5	60.1	8.5
Aegean	42.9	52.3	4.8	40.8	54.1	5.1	43.0	48.9	8.0	37.3	58.4	4.3
Eastern Marmara	65.6	28.2	6.2	66.3	27.8	5.9	26.8	61.4	11.8	34.0	55.1	10.9
Western Anatolia	61.5	35.5	3.0	68.0	29.2	2.8	36.0	57.0	7.0	36.0	60.2	3.9
Mediterranean	61.4	32.6	6.0	52.0	40.0	8.0	20.8	73.1	6.1	27.3	66.4	6.4
Central Anatolia	79.8	18.8	1.3	64.0	30.4	5.7	23.9	71.1	5.0	17.0	79.2	3.9
Western Blacksea	74.7	21.9	3.4	63.8	31.2	5.0	27.4	67.0	5.6	27.4	64.8	7.8
Eastern Blacksea	62.7	33.4	3.9	68.2	26.5	5.3	23.3	69.5	7.2	32.1	57.6	10.3
Northeastern Anatolia	21.3	74.2	4.5	20.1	74.9	4.9	37.3	58.4	4.3	43.3	52.7	4.0
Centraleastern Anatolia	39.4	56.9	3.7	40.7	53.6	5.8	41.6	55.1	3.3	53.8	43.8	2.5
Southeastern Anatolia	49.7	44.6	5.7	49.2	44.0	6.9	33.4	60.4	6.2	19.5	72.4	8.1
Total	52.3	43.0	4.7	56.9	38.2	4.9	33.5	60.5	6.0	33.7	60.6	5.7

5.4. Perceptions about CCT Program

The most interesting outcome of the survey is that the respondents do not have any idea why the transfers are being made. In the first survey nearly 60 per cent in the treatment group and 64 per cent in the control group expressed that they do not know exactly the reason why the CCTs are being made. In second survey however there has been deterioration for both groups. This percentage is higher especially in rural areas. Most of the respondents who believe they know the reason for receiving grants, expressed that they have been receiving them for their children's sake or for their children's education needs. They believe that these grants have been provided by the state. However there is a common belief that there is not publicity about the program and they are aware of the CCT program only because their friends, relatives, school teachers or village administrators inform them. Even though they receive the grants, they generally unaware that girls receive more money than boys or children at secondary school receive more transfers compared to primary school students. Generally they believe that the targeting process is fair. However, those who express concern about unfairness claim that the grants are given to people who are not in need; or there is a positive discrimination towards friends or acquaintance of local Fund workers.

Table 12. Do You Know Why CCTs are Being Granted?

| | First Survey | | | | Second Survey | | | |
| | Treatment | | Control | | Treatment | | Control | |
	No	Yes	No	Yes	No	Yes	No	Yes
İstanbul	84.2	15.8	58.4	41.6	54.9	45.1	57.8	42.2
Western Marmara	77.8	22.2	84.0	16.0	66.7	33.3	54.5	45.5
Aegean	42.6	57.4	42.5	57.5	67.4	32.6	69.8	30.2
Eastern Marmara	77.6	22.4	78.6	21.4	62.5	37.5	65.2	34.8
Western Anatolia	75.2	24.8	76.3	23.7	88.2	11.8	87.8	12.2
Mediterranean	54.1	45.9	49.5	50.5	58.3	41.7	53.9	46.1
Central Anatolia	90.6	9.4	89.0	11.0	63.6	36.4	53.4	46.6
Western Blacksea	76.1	23.9	68.1	31.9	78.2	21.8	73.5	26.5
Eastern Blacksea	71.1	28.9	69.6	30.4	51.3	48.8	65.3	34.7
Northeastern Anatolia	48.1	51.9	46.7	53.3	58.2	41.8	56.5	43.5
Centraleastern Anatolia	73.8	26.2	66.3	33.7	67.2	32.8	78.0	22.0
Southeastern Anatolia	49.2	50.8	57.2	42.8	74.4	25.6	70.1	29.9
Total	60.0	40.0	64.2	35.8	68.6	31.4	73.2	26.8

Table 13.CCTS are Given for

	First Survey		Second Survey	
	Treatment	Control	Treatment	Control
Children's education	29.5	27	24.3	24.6
Children	20.8	16.7	14.2	16.6
Helping people in need	12	19.6	18	16.1
Alleviating poverty	9.8	11.8	14.6	14.7
Assisting financially	7.4	7.1	13	12.5
They need	3.8	4.4	6.4	5.6
Overcome financial difficulties	3.8	5.2	2.5	5.6
Health	3.5	2	1.2	2.8
Supporting family budget	3.3	2.6	5	1
Other	6	3.5	0.8	0.4
Total	100	100	100	100

Table 14. Do You Think There is Enough Publicity Concerning CTT Program?

	First Survey						Second Survey					
	Treatment			Control			Treatment			Control		
	Yes	No	No idea	Yes	No	No idea	Yes	No	No idea	Yes	No	No idea
İstanbul	11.0	64.7	24.3	20.0	43.5	36.6	8.3	52.6	39.0	11.9	50.0	38.1
Western Marmara	18.1	54.9	27.0	5.2	65.6	29.2	35.9	49.2	14.9	35.7	39.9	24.4
Aegean	28.7	36.9	34.5	29.3	36.5	34.2	21.7	32.9	45.3	33.4	35.4	31.2
Eastern Marmara	37.9	39.4	22.7	38.8	40.4	20.8	34.9	45.0	20.2	30.3	44.7	25.0
Western Anatolia	23.4	45.3	31.3	20.9	50.1	29.0	35.7	39.6	24.7	45.4	37.3	17.4
Mediterranean	30.4	44.4	25.1	38.0	32.7	29.2	26.4	48.5	25.2	33.9	41.8	24.4
Central Anatolia	20.2	21.7	58.1	15.5	23.0	61.5	35.3	30.1	34.6	26.5	30.0	43.5
Western Blacksea	43.6	37.2	19.2	32.2	50.5	17.3	43.7	36.2	20.0	43.0	35.2	21.8
Eastern Blacksea	39.9	38.6	21.5	46.7	31.6	21.7	20.6	49.5	29.8	30.2	50.5	19.3
Northeastern Anatolia	44.0	46.6	9.5	38.9	54.1	6.9	22.9	46.1	31.0	23.7	41.5	34.8
Centraleastern Anatolia	44.2	41.1	14.7	38.7	44.9	16.4	35.2	31.9	33.0	28.1	28.2	43.7
Southeastern Anatolia	43.9	38.8	17.3	51.3	37.7	10.9	46.4	35.9	17.7	35.3	45.1	19.6
Total	37.0	41.1	21.9	31.6	43.6	24.8	34.4	39.0	26.6	36.5	38.8	24.8

Table 15. Do You Think the CCTs are Granted Fairly?

	First Survey				Second Survey			
	Treatment		Control		Treatment		Control	
	Yes	No	Yes	No	Yes	No	Yes	No
İstanbul	63.8	36.2	79.8	20.2	60.6	39.4	71.6	28.4
Western Marmara	90.2	9.8	81.7	18.3	74.3	25.7	63.0	37.0
Aegean	72.8	27.2	64.5	35.5	82.9	17.1	79.7	20.3
Eastern Marmara	55.7	44.3	59.1	40.9	74.6	25.4	81.0	19.0
Western Anatolia	66.2	33.8	64.5	35.5	87.2	12.8	87.8	12.2
Mediterranean	54.6	45.4	68.6	31.4	63.5	36.5	54.0	46.0
Central Anatolia	79.8	20.2	78.9	21.1	72.8	27.2	69.0	31.0
Western Blacksea	68.6	31.4	60.0	40.0	80.1	19.9	77.4	22.6
Eastern Blacksea	64.4	35.6	69.4	30.6	59.1	40.9	63.9	36.1
Northeastern Anatolia	67.5	32.5	59.2	40.8	71.0	29.0	82.9	17.1
Centraleastern Anatolia	72.3	27.7	61.5	38.5	77.1	22.9	76.5	23.5
Southeastern Anatolia	68.6	31.4	62.8	37.2	76.1	23.9	81.3	18.7
Total	67.2	32.8	64.6	35.4	74.8	25.2	78.4	21.6

Table 16. Why do You Think Targeting Process has Problems?

	First Survey		Second Survey	
	Treatment	Control	Treatment	Control
Not given to those really in need	25.5	30.4	8.8	13.6
Only people who have friends / connection with Fund get the grant	18.5	15.3	14.4	12.9
Financially better off people get the grants	18.2	20.3	10.2	14.7
There is discrimination	13.2	10.0	17.5	15.0
Beneficiaries are not being monitored after receiving grants	12.5	11.4	32.9	27.5
Targeting process is unfair	10.6	9.6	14.2	13.8
Other	1.4	3.0	2.0	2.5
Total	100	100	100	100

5.5. Priorities in Assistance Demands

Overall, a little more than half of the respondents state that they have applied for other organizations to get financial and / or in-kind transfers. Additionally more than 60 per cent of them applied to GDSAF for different kinds of assistance, mainly for food and heating assistance. In addition to education transfers, health and medical treatment have also been in high demand. When the respondents were asked about the priorities of their immediate needs, it emerges that for both surveys the cash transfers are highly preferred. It is followed by food, heating and clothing assistances. However income generating micro credits (projects) do not generally have a high priority in their ranking. The applicants as well as the beneficiaries prefer to get cash or in-kind assistance, instead

of professional help to have their own small scale enterprises. This may indicate that people who are in need of financial support are quite satisfied with their situation or lack the necessary skills to start a small business of their own. The GDSAF then can be advised to draft employment and income generating support programs or projects which are attractive to the targeted population, rather than providing cash or in-kind transfers.

Table 17. How can You Prioritize Your Basic Immediate Needs?(First Survey)

	1	2	3	4	5	6	7	8	9
Treatment Group									
Cash	54.3	14.1	8.0	6.7	6.3	4.0	6.3	2.7	1.5
Food	13.1	41.3	27.9	10.1	3.8	1.9	0.8	0.8	0.3
Health	12.2	7.3	10.6	14.4	14.3	16.0	10.3	8.1	8.1
Accommodation	9.1	12.1	7.6	10.7	8.5	7.8	8.1	10.4	6.5
Education	6.8	11.1	12.2	10.5	12.5	9.9	13.5	18.2	9.8
Heating	1.7	5.0	7.6	12.3	14.1	14.5	20.6	24.7	14.2
Furniture	1.7	2.8	7.6	12.3	16.9	21.7	22.6	12.9	4.7
Projects	0.6	0.8	0.9	0.9	1.9	4.9	10.0	17.2	51.9
Clothing	0.5	5.5	17.7	22.2	21.8	19.4	8.0	5.0	2.9
Control Group									
Cash	54.8	17.1	9.0	6.4	4.3	3.0	4.5	2.8	0.8
Food	14.7	38.9	27.3	11.2	4.0	2.2	0.9	0.5	1.0
Health	7.1	7.5	11.0	15.1	14.4	15.4	12.8	10.7	11.4
Accommodation	6.2	9.2	7.5	10.0	9.7	8.9	9.9	11.9	7.6
Education	11.7	14.0	13.5	11.7	10.6	9.7	11.1	15.0	6.1
Heating	2.9	6.7	11.2	12.1	14.9	14.2	17.6	22.2	10.8
Furniture	1.7	2.6	5.2	10.8	16.8	20.0	25.4	16.0	3.8
Projects	0.2	0.2	0.4	0.6	0.8	3.9	14.7	15.7	50.1
Clothing	0.4	3.5	14.7	21.7	24.4	20.4	10.4	5.8	2.2

Table 18. How can You Prioritize Your Basic Immediate Needs? (Second Survey)

	1	2	3	4	5	6	7	8	9
Treatment Group									
Cash	38.2	15.9	11.5	12.5	9.3	4.1	3.2	3.0	2.8
Food	19.4	31.8	23.1	15.9	8.4	2.2	1.3	0.9	0.7
Health	14.7	7.3	10.6	14.4	14.3	16.0	10.3	8.1	8.1
Accommodation	4.8	8.5	9.5	11.9	10.1	7.0	7.9	9.8	6.4
Education	16.0	12.8	12.6	12.2	14.8	9.7	7.5	10.1	5.3
Heating	5.3	16.8	13.9	10.4	11.0	13.3	16.2	21.7	23.1
Furniture	0.9	1.5	3.1	5.9	10.0	18.6	31.0	28.1	5.9
Projects	0.2	0.0	0.0	0.5	1.4	3.5	15.2	14.7	50.6
Clothing	0.5	3.0	10.8	14.9	22.8	31.6	10.4	5.8	1.0
Control Group									
Cash	31.0	15.2	14.3	14.0	10.7	6.0	5.6	3.9	3.5
Food	24.9	28.1	22.8	15.5	8.3	2.0	1.4	0.6	0.5
Health	14.6	9.2	15.1	15.0	13.0	11.6	8.4	6.6	3.8
Accommodation	5.3	8.6	9.2	11.4	8.6	5.9	6.5	7.8	5.0
Education	16.3	14.0	12.9	11.1	15.9	9.1	8.7	11.4	3.6
Heating	5.9	19.4	12.5	11.6	10.4	12.5	15.2	20.5	23.9
Furniture	0.9	1.6	2.8	6.6	10.4	18.4	28.1	27.7	7.3
Projects	0.4	0.5	0.6	1.0	1.0	6.2	7.4	15.2	56.3
Clothing	0.4	3.5	14.7	21.7	24.4	20.4	10.4	5.8	2.2

5.6. Assets Ownership and Expenditure Patterns

The survey also investigated the asset ownership patterns of the respondents. The results indicate that the highest income generating assets are ownership of shops, sheep, cattle and land for both treatment and control groups. For both surveys the weighted income from the assets are higher for the control group compared to the treatment group. When the monthly expenditure patterns are examined, it emerges that the respondents spent more on food, rent and heating. However, the amount spent on health, culture and services are very low. Figures also indicate that smoking and alcoholic drink consumption constitute a considerable amount.

Table 19. Annual Income from Assets

	n	Average Earnings (TL)	*n*	Average Earnings (TL)
First Survey				
	Treatment Group		Control Group	
Shop	11.00	2763.71	13.00	19608.39
Arable field	45.00	1454.57	33.00	1323.63
Vineyards / fruit garden	23.00	632.81	12.00	1811.81
Land	12.00	1515.34	5.00	449.85
Nonarable land	56.00	1414.17	43.00	2108.05
Sheep	39.00	1771.84	16.00	1233.29
Cattle	69.00	1162.90	60.00	783.41
Poultry	32.00	213.50	20.00	57.83
Weighted income from assets		45495.32		60139.98
Second Survey				
	Treatment Group		Control Group	
Shop	11.00	1841.81	15.00	1405.77
Arable field	41.00	2522.87	49.00	4343.74
Vineyards / fruit garden	10.00	963.46	10.00	900.74
Land	7.00	655.01	6.00	281.60
Nonarable land	56.00	2351.82	76.00	3480.49
Green house	1.00	200.00	2.00	70.92
Sheep	18.00	11095.03	39.00	901.34
Cattle	44.00	4618.39	76.00	6137.45
Poultry	17.00	208.14	30.00	365.86
Bee hive	2.00	1104.69		
Weighted income from assets		67848.66		113540.00

Table 20. Monthly Expenditure Excluding Transfers (TL)

	n	Average Expenditure (TL)	*n*	Average Expenditure (TL)
First Survey				
	Treatment Group		Control Group	
Food	5073	219.45	4203	235.15
Clothing	3893	58.49	3066	52.63
Rent	17	206.13	1685	231.58
Heating	2494	64.76	2540	216.44
Education	2716	87.82	2727	91.26
Health	297	56.16	2905	53.92
Communication	3931	31.91	3639	32.18
Sanitary	449	43.07	3609	34.37
Transportation	2643	60.74	2815	56.06
Smoking	2572	103.69	1688	107.54
Utilities	4826	79.77	4104	91.01
Culture / art	93	17.83	148	34.78
Weddings etc.	506	28.81	321	36.98
Services	57	22.74	99	45.38
Furniture	466	28.07	106	48.76
Alcoholic beverage	18	146.77	16	70.43
Mortgage	7	142.77	10	238.76
Weighted expenditure		161906.6		204667.8
Second Survey				
	Treatment Group		Control Group	
	n	Average Expenditure (TL)	*n*	Average Expenditure (TL)
Food	4203	235.15	4214	218.7
Clothing	3066	52.63	2982	49.1
Rent	1685	231.58	1728	236.72
Heating	2540	216.44	2546	188.27
Education	2727	91.26	2775	89.29
Health	2905	53.92	2873	50.54
Communication	3639	32.18	3606	33.59
Sanitary	3609	34.37	3556	32.79
Transportation	2815	56.06	2759	54.93
Smoking	1688	107.54	1661	113.38
Utilities	4104	91.01	4110	89.48
Culture / art	148	34.78	151	45.25
Weddings etc.	321	36.98	247	35.92
Services	99	45.38	69	28.97
Furniture	106	48.76	113	29.6
Alcoholic beverage	16	70.43	13	45.82
Mortgage	10	238.76	16	116.95
Weighted expenditure		204667.8		195192.2

5.7. Contribution of CCTs to the Beneficiaries

Nearly 75 per cent of the respondents in the first survey and nearly 68 per cent of the respondents in the second survey claim that transfers are not enough for them in meeting their needs. Around a quarter and one third of them indicate that the amount is not enough but they make ends meet for the first and second survey, respectively. The percentage of those who express that the transfers are sufficient to maintain their lives is below 3 percent. Nearly 90 per cent of the beneficiaries in İstanbul region do not find the transfers satisfactory. It appears that conditional transfers do not relieve the difficulties of immediate poverty (Tables 21 and 22).

Table 21. Sufficiency of CCTs Grants: Treatment Group

	Rural (%)			Urban (%)			Total (%)		
	Not Sufficient	Insufficient but coping	Sufficient	Not Sufficient	Insufficient but coping	Sufficient	Not Sufficient	Insufficient but coping	Sufficient
İstanbul				98.2	1.8	0.0	98.2	1.8	0.0
Western Marmara	91.7	6.5	1.9	90.2	9.8	0.0	91.3	7.9	0.9
Aegean	39.8	58.6	1.6	64.5	34.7	0.8	59.3	39.7	1.0
Eastern Marmara	40.3	58.3	1.4	62.9	37.1	0.0	57.0	42.6	0.4
Western Anatolia	86.5	13.5	0.0	66.5	29.9	3.6	68.7	28.2	3.2
Mediterranean	84.7	15.3	0.0	82.3	17.2	0.5	82.7	16.9	0.4
Central Anatolia	71.7	28.3	0.0	81.8	9.1	9.1	73.7	24.6	1.8
Western Blacksea	84.3	15.7	0.0	70.6	29.4	0.0	80.1	19.9	0.0
Eastern Blacksea	78.0	21.1	1.0	75.7	23.3	1.0	77.2	21.8	1.0
Northeastern Anatolia	68.8	30.8	0.5	53.5	45.1	1.4	65.6	33.7	0.7
Centraleastern Anatolia	76.7	23.3	0.0	71.8	28.2	0.0	76.0	24.0	0.0
Southeastern Anatolia	75.3	19.7	5.0	78.8	19.7	1.5	77.4	19.7	2.8
Total	74.1	24.7	1.2	74.4	24.6	1.0	74.2	24.7	1.1

Table 22. Sufficiency of CCTs Grants: Control Group

	Rural (%)			Urban (%)			Total (%)		
	Not sufficient	Insufficient but coping	Sufficient	Not sufficient	Insufficient but coping	Sufficient	Not sufficient	Insufficient but coping	Sufficient
İstanbul				85.9	14.1	0.0	85.9	14.1	0.0
Western Marmara	87.0	13.0	0.0	74.8	25.2	0.0	78.9	21.1	0.0
Aegean	70.9	29.1	0.0	55.3	41.9	2.8	59.4	38.5	2.1
Eastern Marmara	60.6	35.1	4.3	62.3	34.9	2.8	62.0	34.9	3.1
Western Anatolia	55.8	32.7	11.5	56.9	31.7	11.4	56.9	31.9	11.2
Mediterranean	76.7	21.4	1.9	73.9	25.6	0.5	74.3	24.9	0.7
Central Anatolia	77.1	22.9	0.0	60.5	34.9	4.7	73.5	25.5	1.0
Western Blacksea	56.1	42.3	1.5	63.4	34.5	2.1	58.8	39.6	1.6
Eastern Blacksea	65.3	34.7	0.0	80.2	17.3	2.5	70.1	29.1	0.8
Northeastern Anatolia	77.3	21.4	1.3	82.1	16.4	1.5	78.0	20.6	1.3
Centraleastern Anatolia	67.8	27.1	5.1	81.8	10.2	8.0	70.1	24.3	5.6
Southeastern Anatolia	80.1	16.9	3.0	53.3	44.2	2.5	65.3	32.0	2.7
Total	71.9	25.5	2.7	63.9	33.4	2.8	67.7	29.7	2.7

Conditional Education Transfers beneficiaries are asked about their intension for their children if they are not eligible for the grants. Those who express that they would not let their daughters to continue their education are higher than the ratio for the boys. These parameters are statistically significant at 5 per cent level of significance, suggesting that CCT program is effective (Table 23).

Table 23. Impact of Conditional Education Transfer

	Turkey
Ratio of boys who would not continue their education	0.0435 (0.000)*
Ratio of girls who would not continue their education	0.0470 (0.000)*
Values in parentheses are p values.	

Additionally the beneficiaries of conditional health transfers are more likely to take their children to regular visits to the health care centers once they become eligible for the grant. While the ratio of families who regularly visit healthcare centers was 56.75 per cent prior to the CCT program, this ratio increased to 69.78 per cent once they become eligible. There is a statistically significant increase in the healthcare visit numbers for the beneficiaries.

6. The Qualitative Analysis

In order to assess the impact of conditional education and health transfers, a field research has been conducted in 12 cities, namely Adana, Ankara, Çankırı, Denizli, Edirne, Erzurum, Eskişehir, Gaziantep, İstanbul, Malatya, Sivas and Trabzon during March 2011 – April 2011. A total of 397 in depth interviews with beneficiaries and nonbeneficiaries as well as with a variety of key informants (teachers, workers in health clinics, teachers, primary school principals and program staff) have been conducted. The sample covers 94 interviews with beneficiaries; 46 interviews with nonbeneficiaries; 28 interviews with school administrators; 39 interviews with teachers; 72 interviews with local governors 65 interviews with healthcare providers and 53 interviews with GDSA officials. However this report involves only the 94 beneficiary households (Table 24).

Table 24. Qualitative Analysis Interviews

Province	District	n	Province Total
Adana	Karataş	16	33
	Seyhan	17	
Ankara	Altındağ	17	35
	Bala	18	
Çankırı	Center	18	33
	Kızılırmak	15	
Denizli	Center	18	34
	Sarayköy	16	
Edirne	Center	17	31
	Meriç	14	
Erzurum	Narman	13	34
	Yakutiye	21	
Eskişehir	Çifteler	19	36
	Odunpazarı	17	
Gaziantep	Şahinbey	16	33
	Yavuzbey	17	
İstanbul	Çatalca	12	32
	Sultanbeyli	20	
Malatya	Center	15	30
	Yeşilyurt	15	
Sivas	Center	19	31
	Zara	12	
Trabzon	Center	20	35
	Tonya	15	
Total			397

The question guide for the face to face interviews addressed perceptions related to (*i*) Knowledge and perceptions concerning the CCT program; (*ii*) factors that could affect the capacity of recipients to satisfy the conditions or co-responsibilities (such as distance, availability, schedule, costs, treatment received, and culturally informed beliefs); (*iii*) logistical aspects of the monetary transfers; (*iv*) use of the transfers; (*v*) perceptions regarding the impact of CCTs on education and health outcomes; and (*vi*) other factors considered relevant or important.

The discussions with individual participants lasted on average around one hour and were recorded. Supplementary notes ensured the accuracy of the transcriptions. After transcripts were developed and supplemented by the field notes, open coding was used to identify the concepts and their properties and dimensions. The research concentrated on the response patterns to individual questions posed in the interviews. The next step in the qualitative analysis entails using axial coding to relate the categories developed in the previous stage, to further refine emerging categories, and to link categories on the basis of underlying properties and dimensions. Then major themes and relationships among them are refined by employing selective coding (Strauss & Corbin, 2008).

6.1. Knowledge and Perceptions Concerning the CCT Program

Although different definitions are provided regarding the conditional cash transfers, the majority of the respondents agree that they are "money given to those who are in need of help" or "assistance provided to children for educational purposes". However the respondents are not clear about the origin of the transfers. Some of them think that these transfers are provided by local mayors or other charities. Moreover some of the respondents confuse conditional cash transfers with unconditional monetary transfers. Only 9 people have no idea about transfers. The majority of the beneficiaries believe that government hand them money for their children's educational needs, not always being aware of the conditionality; and regard it as a right since they have children.

> "They are given because my children are attending the school" (Filiz Ö., Adana).

> "As far as I know Ankara gives the money. It is the right of my children as I do not have enough money (resources). I have 5 school aged children and 3 little ones. We need everything, shoes, clothing, education expenditures... thanks God they are hardworking and I want them to complete their education" (Asiye K., İstanbul).

The respondents were asked if people can get sufficient information regarding the conditional cash transfer programs and if there is any room for improvement. It appears that beneficiaries who live in the same neighborhood and / or from the same socio- economic background do have sufficient information to be able to apply for the transfers. This could be due to the solidarity and the close relationships among these people. Almost 22 per cent of the respondents agree that the information about the CCTs should be spread thoroughly, especially among those districts in poverty. They express that the most important and effective medium of information is personal communication. Then 19 per cent of them believe that television could be the most effective instrument for giving information about CCTs.

Additionally the perceptions regarding the determination of the CCT beneficiaries have also been investigated. Almost all of the respondents agree that all applications should be thoroughly investigated before a decision is made. It appears that they mainly rely on school administrators, teachers and local administrators in that process. They all are aware of the online investigation performed by the local GASF workers at the time of application using applicants' national identity number and they trust that system would not give misleading information about financial situation of an individual. Hence they agree that the decision process is fairly reliable.

"I believe that most of the people do not tell the truth so an investigation and a house visit must be made" (Emine Ç., Çankırı).

"People who are not in desperate need should not receive the money but poor people should. Go to their houses and see for yourselves if they are poor or not for they deceive everybody" (Şaziye H., Edirne).

6.2. Use of Cash Transfers

One of the main goals of conditional cash transfer programs is the alleviation of immediate poverty by increasing household consumption levels in the short run. Since CCTs provide a steady stream of income, they have helped buffer poor households from the worst effects of unemployment, catastrophic illness, and other sudden income shocks. Generally the cash transfers can be allocated on four categories: (i) costs directly related to compliance with the health and education co-responsibilities, including transport and purchase of required school supplies and clothing; (ii) expenses for basic needs not directly related to the program, such as food, home repairs, and agriculture; (iii) investment in starting small businesses; and (iv) savings, especially for emergencies (Waters, 2010). Among these four categories of expenditures, food expenditures have a special importance in regard to immediate poverty alleviation.

CCTs have increased consumption levels among the beneficiaries, leading to substantial reductions in poverty among them, depending on the amount of the transfer and the design of the targeting mechanism (Fizbein et al., 2009). In a recent empirical research Attanasio et al. (2012) suggest that conditional cash transfer programs that are targeted at women can give them more say in household decision-making and lead to a more than proportional increase in the share of the family budget spent on food. Their analysis for Colombia implies that an increase in total consumption by 10% would lead to a decrease of 1% in the share of food, suggesting that even for very poor households; food is to be considered a necessity rather than a luxury.

The respondents in our survey recognized that, primarily they need to spend the money to their children's educational needs. However the majority of them (48 per cent) stated that they used the money for their basic consumption needs: food, vegetables, meat and dairy. Whereas nearly 20 per cent of the respondents claim that they spend the stipend on clothing; 17 per cent spent transfers on children's educational needs, such as stationary, school uniforms, shoes. However a small group of respondents expressed that pharmacy and internet access costs are also met by transfers. It emerges from our analysis that mothers do not want their children feel uncomfortable, as they cannot afford to buy the items their classmates or friends can afford. Another important factor to keep their children fed, especially before sending them to school. Moreover giving pocket money to children is regarded essential, as this may give children some kind of responsibility and independence.

"What I most want is that my children should not envy anyone. I do not want my children deprived of anything. I can afford to buy fruits, even one kilogram, when they want to have it" (Şengül Ç.**,** Erzurum).

"I buy clothing for my children, sometimes they want to eat cheese, meat ... I buy them what they want" (Nursabah U., Eskişehir).

"I do not want to send my children to school hungry. I buy food for them. I also give them some pocket money" (**Özgür** S., Trabzon).

"Sometimes I spent the money for my home, sometimes for my children. For their food, notebooks, pens, paints. There are homeworks too, that we need to pay for to get printed at a stationary office" (Beyhan D., Ankara).

It emerges from our analysis that respondents do not consider spending the transfers for saving or entrepreneurship purposes. This may be due to the fact that conditional cash transfer per child is actually too small to invest or save. Actually the respondents emphasize that the amount of transfers are not enough to meet all their basic needs, but they can only manage to meet their immediate basic needs, especially those of children. When they were asked if the amount of transfers is sufficient to meet all their needs they mainly stated that it was not adequate nonetheless they can make ends meet.

"We are poor. We do not have house, we live in a barn. We do not have anything. So it (transfer) is not enough but it is helpful" (Fatım Y., Denizli).

"It is not enough. I paid the rent last month when I got the stipend. I could not even spend it on my children" (Ayşegül B.,Sivas).

Sometimes interesting needs emerge:

"Unfortunately it is very small amount, not enough for our needs. ... everything is expensive. For example children stage a show at school, I needed to get a costume for my child, the stipend cannot cover the cost" (Raziye K., Malatya).

"It is not enough. (...) Because my child is at the third grade in the secondary school (17 years old). S/he needs computer, printer which we do not have. So we have to pay stationary offices to use computers" (Kadriye, H., Eskişehir).

However the most striking anecdote is:

"No the money does not meet our needs, but at least we can have something to spend on our children. (...) Compared to old times, we are better off. I remember once, before we

become a beneficiary family, my son, my only son after four daughters, had fainted at school because of hunger. I asked him what had happened. He showed his tummy saying that it was aching. Then I realized he had not had anything to eat before going to school. I took him back home. I cried for a week because we were so poor. (...) Thanks God we are better off now" (Yıldız A., Adana).

These findings from the qualitative analysis support Leroy et al. (2010) who claims that CCTs positively affect child nutrition through different channels. Firstly, increases in household income as a result of CCTs, have a positive effect on the quality of the household diet, as shown in increased spending on animal-source foods, fruits and vegetables. Besides, CCTs may also significantly increase household energy consumption. Ruel and Hoddinott (2008) claim that good nutrition as well as the optimal timing of interventions to improve child nutrition are essential to children's physical and cognitive development, in order to have positive long-term effects of such interventions[3]. Previous empirical research indicates that CCTs have a positive impact on child nutrition, leading to healthy generations (Rivera et al., 2004).

6.3. Gender Impacts and Mothers' Empowerment

Adult women, as a key to provide improvements in the life chances of their children, born and unborn, play a crucial role in the conditional cash transfer programs on which the success of the program depends. As principal carers of children and family, mothers are targeted and charged with fulfilling the demands of the program through the quasi-contractual arrangement of co-responsibility. They receive the stipend conditional on fulfilling the duties laid out by the program. However the failure to comply with these requirements can lead to termination of the beneficiary status. The conditional cash transfer program aims to encourage mothers to take responsibilities for and be a part of their children's health and education decisions and to improve the nutritional status of children, along with their own health, especially if they pregnant or breastfeeding. However the secondary goals of the program, such as empowerment of women, citizens' participation, strengthening community ties and financial independence are as important as raising up a healthy and educated generation. In order to promote gender equity, the transfers are directly awarded to the beneficiary mothers. Therefore cash transfers can be regarded as a social transfer for the benefit of women.

The qualitative research provided in this paper seeks to investigate the impact on households of mothers' incorporation into the program, to see what aspects of family wellbeing were affected and how household structure influenced outcomes. It also examined the gender impact of the program, focusing on the perceptions of women in regard to their self-esteem and empowerment. The respondents were asked if they have any idea about why the transfers target mothers and if they find that agreeable; whether mothers secure any kind of financial independence since they receive the monthly transfers. Additionally the beneficiaries were asked if they participate in the decision making process in their households.

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3 Please see Leroy et al. (2009) and Lagarde et al. (2007) for reviews of evidence regarding the impact of conditional cash transfer programs on child nutrition outcomes.

All of the respondents agree that it is wise to give the stipends to mothers since they define fathers as irresponsible since the fathers spend money for their own needs in the first place. Some of them expressed that the fathers are insensitive. Thanks to the transfer program, they find themselves more powerful, have a greater say in family decisions, and they can spend the money as they see fit. Additionally, 60 per cent of the respondent mothers spend the stipend all by themselves whereas 22 percent of them decide together with their husbands about spending the stipends. Only 17 per cent of mothers give the stipends to their husbands without any joint decision making.

> "I find this program quite fitting, as mothers are the ones who suffer most" (Filiz Ö., Adana).

> "The money is given to mothers because fathers drink alcohol and gamble, not that my husband does so, but there are fathers who are irresponsible" (Şengül B. Adana).

> "Mothers manage the house, take care of the children; therefore they should receive the money" (Beyhan D., Ankara).

> "If the money is given to my husband he will buy drinks, cigarettes, go to the coffee house. But I will spend the money for my children, for their books, pencils, socks, food. I know my children's needs. Fathers have bad habits" (Ayşegül B.,Sivas).

The focus of economics literature on domestic violence is a relationship between female income, employment and/or earnings and the probability of domestic violence. The previous empirical research agrees that there is a negative relationship between female economic status and violence (Aizer, 2010; Bowlus & Seitz, 2006; Farmer & Tiefenthaler, 1997.) Another strand of literature examines the impact of policy changes, such as criminal law, ease of divorce and provision of public resources for victims on the prevalence of domestic violence. The existing literature states that increasing sanction and resources reduces domestic violence as does reducing barriers to divorce (Aizer & Dal Bo, 2009; Iyengar, 2009; Stevenson & Wolfers, 2006). Aizer (2011) argues that poor people are exposed to greater violence and violence reduces health, starting as early as birth. Thus the higher levels of violence experienced by poor women may also contribute to the intergenerational persistence of poverty.

In this study the mothers were asked if there was any domestic violence or fights in their family before they had been entitled for conditional cash transfers; and whether there has been a reduction in the degree of violence after they started to get the conditional cash transfers. Only 8 per cent of the respondents claimed that there has never been any domestic violence in their household; but the majority stated that there had been continuous violence and fights in their families; the main reason being the financial difficulties faced. Almost 71 per cent of the victims of violence expressed the termination or decrease of violence after they started to receive stipends.

> "There had been many fights. Because children need many things, that we could not have afforded to buy. I asked my husband and he used to say there is no money. Then I used to get upset and started to yell. We had many fights because of poverty. Not only for us for all poor, fights come from suffering" (Hanife G., Erzurum).

"There had been violence (in our family). (...) But now it decreased because I spend my own money. The money is used to meet my children's needs. What is left is mine. I spend it for food and home" (Hanım S., Trabzon).

"The continuous fights and beatings were all because of poverty. I used to quarrel with my husband; he used to be violent too. Because of all the beatings while I had been pregnant, my eldest daughter was born disabled.(...) But after the stipend the violence decreased" (Yıldız A., Adana).

6.4. Impact of CCTs on Education

Conditional cash transfer programs around the world have been used to induce poor parents to send their children to school and care more for their health (Morley & Coady, 2003). In addition to the objective of reducing immediate poverty, CCT programs provide incentives to encourage households to invest in the human capital of their children. The CCT programs concentrate their interventions at carefully chosen points in the life cycle, focusing particularly on nutrition and health during pregnancy and the first years of life, on the continuation of education during transitions from primary to secondary school (Lomeli, 2008). Impact evaluations show that these programs have been effective in increasing school enrollment, raising school achievements, increasing the amount of time devoted to homework, reducing child labor and improving health outcomes both in rural and urban areas (Barham, 2011; Behrman et al., 2005; de Janvry & Sadoulet, 2006; Diaz & Handa, 2006; Parker et al., 2008; Schultz, 2004;).

The qualitative analysis provided in this paper supports the findings of existing impact evaluation literature. The majority of the respondents in the field study (63 per cent) stated that with their participation in the conditional cash transfer program, their children's achievements have been positively affected. They claimed that there has been an increase in the level of self-confidence and self-esteem of the children. Moreover, approximately half of the respondents expressed the view that CCTs positively affected their children's school attendance, even though some of them never had any problems with attendance. However they all agree that their children are now happier and they attend their school more enthusiastically.

"They are much better now. I could not even afford to give them pocket money previously" (Filiz, Ö., Adana).

"They do not miss the classes now. We buy them stationary, books, shoes, clothing which makes them happy. Then they go to school willingly, with pleasure" (Yıldız A., Adana).

"There has been an increase in their school success. (....) My children used to ask why they cannot wear the thing that their friends have, why they cannot have the books that other can buy. But since the receipt of transfer they can do the things their friends do. They can wear as they like.(...) they are more self confident now" (Fatoş U., Adana).

> *"I have been barely feeding them previously. Now I can provide their basic needs. If they want anything we can afford it. Since they are not worried about the food, they do well at school" (Yıldız A., Adana).*

It emerges from our analysis that nearly 18 per cent of the children work when they find an opportunity of after school hours employment. But nearly 20 per cent of them stated that their children are too young to work. Some of them do not work as their fathers do not give consent; or they are simply lazy. Yet, when the respondents were asked if they are prepared to give up education of their children in exchange for a job opportunity paying more than CCTs, nearly all of them refused employment for their children. Nearly half of the respondents claimed that they are determined to have their children educated, even if they are not eligible for CCTs, even though they would be in financial difficulties. But they expressed that they rely on their children for their old age. They want their children to have a secure, respected employment in order to break the cycle of poverty.

> *"They should go to school. (...) I do not want my children to provide for our family. They will bring home money when they grow up and have a profession" (Ayla K., Trabzon).*

> *"They should be; I do not want them to turn out like us (meaning poor). They should be educated to have their own lives" (Saadet S., Malatya).*

> *"My children should go to school. They should have a regular income in the future, unlike us. I want them to become teachers, nurses, police officers with a secure employment" (Hanife G., Erzurum).*

Generally, the main evidence concerning how CCTs affect gender relations emphasizes the improvements in girls' educational attendance and the effect of managing the stipend on their mothers' status and wellbeing. Traditionally girls from economically deprived households are kept home, especially in the East and Southeast provinces of Turkey for various reasons: to help with household tasks, to take care of their younger siblings, to work in family farm as unpaid worker. Although parents give importance to the education of boys, they would not want to make long term education investments for girls, as girls are married off early, generally, in exchange for a monetary sum, known as *"başlık parası"*. Moreover parents, especially the father, would not want to lose control over their daughters by sending them to school because of fears of what might happen (e.g. sexual threats, leaving home, marrying off her choice, eloping or pregnancy).

However the outcomes of our field research contradict all the previous belief about girls' education in Turkey. All of the respondents strongly expressed their determination about having a good education for their daughters: Only 10 per cent of them stated that there is no need to educate girls beyond the minimum required level (12 years). It appears that mothers would like to attain the goals they could not have in their lives because of poverty. The previous quantitative research assessing the impacts of CCTs for Turkey indicates that conditional education transfers have improved the schooling ratio of girls, whereas there is no statistically significant impact for boys both in the rural and urban areas.

"I could not have been educated but all the girls in the world should be educated" (Filiz Ö., Adana).

"I cannot even read and write, I can barely sign my name, I have my daughters educated whether I have the stipend or not" (Medine A., Edirne).

"That is very important now for a girl stand on her own feet, without needing anyone. She would have her own job, would earn her livelihood, and would make her own decisions" (Mercan D., Edirne).

"I think that all girls should be educated. Because when they are married they would not be dependent on their husbands (...) I would sell my only cow to have my daughters educated" (Dursun B., Ankara).

6.5. Obstacles Faced in the Application Process

The beneficiaries have also been asked if they had faced any obstacles during the application process; if they had any complaints about the behavior of the local Fund personnel. Nearly two thirds of the respondents stated that they had not faced with any obstacle during the application process. Nearly one third of them expressed that the process had been easy to follow with a very helpful personnel they easily had filled the application form.

"We have not faced with any obstacles or difficulties. The personnel helped us" (Meliha S., Denizli).

"The principal of the school has helped me so it was easy to fill the forms" (Hacer A., Ankara).

"When I applied for the grants five years ago I had to fill many forms, had to visit several public offices to obtain the necessary documents. But now it is so easy you can apply with just your identification document" (Beyhan D., Ankara).

Even though they express that the application process is relatively easy, especially when compared with the situation 5 years ago, they make suggestions for further improvements. The respondents stated that the difficulties have been caused by their own unawareness or illiteracy.

"To make things easier people need to be informed about the process" (Fatoş U., Adana).

"I would like them to phone me, when I can collect the grant" (Ayfer K., Eskişehir).

"The best way to inform people is to let teachers make the announcements at school about the transfer programs" (Beyhan D., Ankara).

Once qualified, the beneficiaries state that they can receive the grants quite easily even though there may be delays at times.

> "I do not have any difficulty in receiving the money" (Şengül B., Adana).

> "When there are delays in receiving the money, I go to the local Fund to inquire about the delay they say it is not been approved yet by the committeethey say wait for your turn"(Gönül E., Adana).

The beneficiaries appraise the local Fund personnel for their help:

> "They have always been kind tome you have to treat others in the same way you want to be treated" (Fatoş U., Ankara).

> "They are so cheerful …but they need to be a little more understanding their job is not easy we are generally uneducated. … for example I am literate, but I do not know many things" (Figen Ç., İstanbul).

But some of them have complaints:

> "I do not need to go there if I were rich … no one wants to be in that situation so they should treat us better" (Hanife G., Erzurum).

> "The personnel at the local Fund dismissed me tersely … there is no need to belittle or humiliate us because we get grants from them (the Fund) We are human beings after all … We did not want to be in that situation.. it is enough for them to just answer my question"(Emine K., Gaziantep).

6.6. School Principals' Assessment of Conditional Education Transfers

A total of 28 school principals have been interviewed across 12 provinces (Table 25).

Table 25.Distribution of Principals Interviewed

Province	n	Principal
Adana	2	Yavuz E., Yusuf K.
Ankara	3	Ayhan T., Durmuş Ç., Taylan Ş.
Çankırı	1	Hilmi K.
Denizli	4	Halil A., Halil K., Mahmut A.,Ömer M.
Edirne	2	Nezahat H., Nevdet D.
Erzurum	2	Orhan Ç., Yusuf O.
Eskişehir	3	Erdem Ö., Ertuğrul B., Yaşar I.
Gaziantep	2	**Ökkeş T., Salih B.**
İstanbul	2	Aykut B., Fevzi N.
Malatya	3	Hüseyin Ö., NevinC., Doğan D.
Sivas	2	Hasan K., Mustafa T.
Trabzon	2	Abdullah T., Ahmet İ.
Total	28	

The principles can be divided into three groups according to their views about the importance of their roles in conditional education transfers (CETs). Nearly 40 per cent of them believe they play a crucial role in the targeting mechanism and their responsibilities should be increased. Whereas 28 per cent of them state that they have a very bureaucratic role without any impact on the targeting mechanism. However 30 per cent of them are very uncomfortable for being seen as local fund employees responsible for monetary affairs, rather than being respected as teachers. They state that their primary focus is teaching well, not determining the students who are in need.

> *"It is not our responsibility to assure class attendance of the children whose families are the CET beneficiaries. We step out of our boundaries (responsibilities). As a result we are the ones who are faced with the parents who generally mistreat us by swearing, by scolding. There are parents who accuse us about discrimination" (Aykut B.,* İstanbul*).*

> *"We have 314 students who are on CCT program. We have a great responsibility. However I believe that it is damaging to our school when parents no longer regard us as school but a charity. Our job is to educate. Local administrators should be responsible with this task rather than teachers" (Orhan Ç., Erzurum).*

> *"We have 46 students who are beneficiaries. Principles do not have great responsibilities. We only monitor their attendance and report to the local Fund officials" (Nezahat H., Edirne).*

> *"We have 36 students who are beneficiaries. We inform our students and their families about the CCT programs and help the local Fund officials. We make the required entries to the e-school system about the attendances" (Halil K., Denizli).*

The principles agree that the CET program has not fully achieved its objectives. The main reason is the uncertainty about the expenditure patterns of the families. Secondly the transfer amounts are quite small. However they believe that CCT program encourages children to attend to school and be successful:

> *"I am not sure about its effectiveness. They receive 30-40 TL per child per month. But how much of this is being actually spent on children's needs? We cannot monitor this. Therefore I am skeptical about it" (Orhan Ç., Erzurum).*

> *"CCT program has been designed with good intentions, to help with their financial difficulties" (Yusuf K., Adana).*

> *"With the current amount of monthly transfers, it is quite difficult for children to continue their education. At our school we do not have any problems with attendance. I believe the grants in (more deprived regions) South East and Eastern provinces should be raised to secure the objectives" (Ahmet İ., Trabzon).*

> *"I believe that the program could be effective at secondary school level. The 8 year education is compulsory. But families may not let their children to have further education be-*

yond 8 years level. Then the cash transfers could be more effective. In addition to transfers free lunch and school transportation could also be helpful" (Hasan K, Sivas).

"This is a very poor district. Children come to school for the first two-three days following their families receive the transfers. But then they are lost" (Aykut B. İstanbul).

"I do not think the program is effective. May be 10 per cent, even this is an advantage. But I doubt if the transfer is spent on children. I suspect, especially fathers use the money for other purposes" (Hilmi, K., Çankırı).

The principles agree that the relationship between the schools and the beneficiary families have been improved since the transfer program begun. They state that these families now come to school with affection and enthusiasm; at least they are not afraid of visiting schools by themselves. They claim that the families are now more respectful to teachers as well as to other parents. Moreover there has been an improvement in the communication among them.

"The parents emphasize the importance of education to their children in order to ensure the continuation of the grant. They do not tolerate absenteeism even if they did before the receipt of grants" (Mustafa T., Sivas).

"The parents are now more supportive and respectful" (Nezahat H., Edirne).

When the principles were asked if conditional education program affects students' motivation and attitudes towards school, mainly two arguments have been made. 25 per cent of the respondents state that there have not been any improvements in students' motivation or attitudes. Because the children have not been informed fully about the program and / or they regard the transfer amount too low to change their behavior. Nearly half of the respondents however believe that there has been an improvement in at least one aspect. They state that the children try to improve their attitudes and grades, since they are aware that they are being monitored in terms of attendance and academic performance. They express that the children are sensitive and feel somehow responsible for the continuation of the grants.

"I believe that the first attitude change happens in the family. They regard education important and they prevent their children's absenteeism and encourage their success" (Mustafa T., Sivas).

"There have been improvements in academic performance. The parents take their children to school every day to make sure they attend the classes" (Ertuğrul B., Eskişehir).

6.7. Teachers' Assessment of Conditional Education Transfers

A total of 39 school teachers have been interviewed across 12 provinces (Table 26).

Table 26. Distribution of Teachers Interviewed

Province	n	Teacher
Adana	5	Binnur E., Birdal T., Emel Ç., Hakan G., Hüseyin T.
Ankara	2	Aysel A., Ayşe Ç.
Çankırı	5	Tahsin A., Filiz A., Halil B., Özgür S., Hüseyin Ç.
Denizli	2	Meral Ö., Tacettin B.
Edirne	2	Emel S., Kenan B.
Erzurum	4	Fatih A., Murat A., Şeyma G., Yavuz K.
Eskişehir	4	Aytül Ç., Emine K., Ersan A., Umut B.
Gaziantep	2	Sinan T., Rauf K.
İstanbul	4	Ayşenur K., Merve Ö., Rahmi A., Sibel S.
Malatya	1	Fatih Ö.
Sivas	4	Aslan T., Ayten K., Hatice Ş., Ufuk A.,
Trabzon	4	Fatma K., Hacer L., İlhan T., Melike K.,
Total	39	

Table 27. Teachers' Description of Beneficiary Families

Categories	n
Domestic violence	6
Parents permanently ill	7
Mother permanently ill	9
Father permanently ill	12
One dead parent	14
Migrant family	16
No income	17
Parent divorced	18
Agricultural worker	20
Seasonal worker	28
Low socio – economic level	33

Teachers have also been asked to describe the beneficiary families. Almost all of them expressed that these children are from families of low socio – economic background (Table 27). They generally do not

have a permanent job, but they are mainly seasonal and / or agricultural workers. There are families that do not have an income. Even though divorce is not very common, the presence of illnesses is noted.

> *"Generally families are seasonal workers; fathers and more often mothers do not have an employment, they do not have social security. They have green cards. I believe they need the transfers to survive" (Hatice Ş., Sivas).*

> *"Generally they are poor and have domestic violence (Hakan G., Adana).*

> *They are economically deprived … Parents eitherdivorced or seperated without any regular income" (Filiz A., Çankırı).*

It emerges from the interviews that teachers are aware of the objective of CCTs and the requirements for its continuation. But they observe that the grants are not being used for their specific purpose, which may undermine the effectiveness of the CCT program.

> *"We try to determine the children whose families are in financial difficulties and grants are given to them. But I do not really believe that it serves its purpose. Because this money is used for purposes other than children's needs" (Aysel A, Ankara).*

> *"I believe that the CCT program is designed by the government to provide equal opportunities for all children. But I observe that families use this money for their own needs" (Ayşe Ç., Ankara).*

> They agree that the positive affect of CET are quite limited. Best achievement has been observed at the students' attendance ratios. There has been an improvement in attendance and academic success. This has been due to the fact that the grants are conditional on attendance and achievement.
> *"Students are more hardworking now compared to pre-transfer period. They are careful not to miss any class. They are more active and participating in the classroom" (Hakan G., Adana).*

> *"Even though there has not been any change regarding education, they now come to school with all their equipment necessary at the classroom which give them some sort of self confidence. Additionally they are now able to bring their lunches with them or spend some amount of money at the school" (Fatma K., Trabzon).*

Regarding the uses of conditional education transfers, teachers give different explanations. Nearly 25 per cent of them state that the money is spent on children's needs. However 35 per cent of them are certain that the money is spent not on children but on rent, consumption and clothing.

"The main parts of the grant are spent on children's education needs" (Birdal T., Adana).

"This Money is related to school and spent on children. Even though children could not afford the expenses on books, or stationary, they can now buy these items" (Murat A., Erzurum).

"There is certainly no improvement on children's clothing and / or school materials requested. They (parents) spend money on themselves" (Şeyma G., Erzurum).

Regarding the gender difference in academic performance and its possible linkages with CETs, the majority of the teachers (60 per cent) claim that girls are already more successful compared to boys independent of CET grants. Furthermore they report that there has been a remarkable improvement in girls' enrollment rate, especially in Eastern rural provinces..

"(…) Why girls do strive to be successful? There is oppression of girls especially in rural parts which inspire and encourage them" (Birdal T., Adana).

"Not in this school but at my previous district (rural parts of Erzurum) there has been an improvement in girls' enrollment ratio" (Hakan G., Adana).

"There is not any discrimination in this province. However previously I worked in Van –Erciş, where I observed an improvement in girls' enrollment ratio and attendance" (Aysel A., Ankara).

Generally teachers believe that the targeting mechanism is fair and distribution of the grants is just. Their main worry is that there are many children who are in need but could not get any transfer or could be a beneficiary.

6.8. Healthcare Workers' Assessment of Conditional Health Transfers

A total of 65 healthcare workers have been interviewed in order to investigate their assessment of conditional health transfer program (Table 28).

The great majority of the respondents agree that the amount of the grant is quite low, not enough to finance the beneficiaries' basic needs. Nearly 20 per cent of the respondents stated that they had no idea about the transfer program and its possible effects on beneficiaries. However, nearly 50 per cent of the health care workers believe that conditional health transfers have positive impacts on beneficiary families and children and the rest states that the transfers are partially effective.

Table 28. Distribution of Healthcare Workers Interviewed

Province	n	Healthcare Workers
Adana	6	Bayram T., Erkan G., Nazan G., Oya P., Rafet K., Şengül B.
Ankara	7	Abdullah Ç., Cem A., Fatma Ç., Gülseren T., Harun Y., Seda A., Sultan G.
Çankırı	4	Elif Seda D., Hatice K., Merve B., Sibel K.
Denizli	5	Nazmiye Ç., Tülin E., Elif Y., Sevcan E., Şükran Ç.
Edirne	6	Ercan D., Hale T., Kadriye Ö., Ozan Y., Yaser T., Yeşim K.
Erzurum	6	Çetin A., Abdüsselam G., Orhan Ş., Selma V., Suat G., Üzeyir G.
Eskişehir	6	Zeynep A., Mustafa T., Fatma S., Nilüfer H., Özlem Y., Yasemin S.
Gaziantep	5	Aynur T., Fatih G., Mehmet Ö., Osman B., Nilay E.
İstanbul	3	Ayşe L., Emel Y., Zeynep Y.
Malatya	5	Ayşegül A., Fuat Ö., Halil A., Şahin T., Rukiye K. D.
Sivas	6	Ayça D., Ayla K., Cahit Y., Esra E., Hasan Ö., Serdar A.
Trabzon	6	Mihriban Ö., Sinan E., Saadet K., Hüseyin S., Aylin Y., Elif B.
Total	65	

"I believe that it (CHT) has a positive effect in those children who have never been to the health center before started to come for regular vaccinations. These people are poor and live quite far away from the center, such a motivation (transfer) is an effective mean to draw them to the healthcare center" (Yaser T., Edirne).

"During their pregnancies they paid regular visits to the health care center. They have been paid milk money" (Orhan Ş., Erzurum).

"Even though we do not know how they spend their grants, they have to come to health care center for regular visits. At least we can see if they can take good care of the newborn baby. Because we get the weight and height measurements when they come to us. We ask about how they feed the baby and how the mother spends the money" (Ayşe L., İstanbul).

The respondents agree that conditional health transfers have a positive impact on children's healthcare as there has been an increase in the number of visits by families bringing their children for regular check-ups and / or vaccinations. The main reason is the conditionality of the payments. But some of the healthcare workers disagree and state that there has not been any positive impact.

"They bring their children more often (…) They are more conscious and more aware of the services that are provided and they get them" (Oya P., Adana).

"They are much more careful not to miss any appointment. When I go to villages for regular check-ups more people turn up to see me in order to earn more money. In turn we approach them with affection which may also draw them to us" (Elif S. D., Çankırı).

The healthcare workers are optimistic about the impact of conditional health transfers on general level of health at their district / province. Nearly 60 per cent of them state that there has been an improvement at the general level of health at their province. They claim that the main reason for the positive impact is the increased consciousness level of families about health issues and gaining the good habit of regular doctor visits. Those who think the program has no positive impact argue that the amount paid for each regular visit is not enough to achieve a behavior change.

> *"There has been a positive impact. Our district is not a wealthy place. There are many poor people who are now able to utilize health care services with health transfer program"* (Rafet K., Adana).

> *"I do not think there is any improvement in attitudes towards health care services. You cannot change some habits only by giving money for it" (Cem A., Ankara).*

> *"I do not approve this system where beneficiary families regard their children as a source of income. In our health care system, free health services are provided via general practitioners. They do not need to receive Money for a service which is already free" (Emel Y.,* İstanbul*).*

7. The Quantitative Analysis

7.1. Descriptive Analysis of e-School Database

Human capital is considered to be among one of the important determinants of economic growth and social welfare (Shalberg, 2007; Yılmaz, 2009). Educational outputs have generally been reviewed and assessed in order to improve the quality of education and inform the public (Bonnet, 2002).

Coleman et al. (1966) investigate the issue of education inequality and the impact of socio- economic background on academic success. Additionally other factors have also been considered to have an impact on academic performance. They can be classified into three dimensions: 1) teacher characteristics, 2) building, equipment and curriculum, and 3) social background and family characteristics of students. Coleman report inspired a strand of literature examining the role of schools on student performance. Edmonds (1979) reports that schools have a significant, yet small impact on children's success. Heyneman and Ransom (1990) state that for low income countries school environment is as important as out of school factors for academic success, especially for mathematics and science. However for high income countries family background is more important. Others argue that student success is a function of school (Sammons et al., 1997).

Conditional Education Transfers aim to increase school enrollment and attendance rates and lead to an improvement in academic performance of beneficiary families' children. The grants are conditional on school attendance (80 per cent). Thus an increase in the school attendance ratios can be expected for these children. Another objective of the program is to increase girls' enrolment

rates, especially in the rural areas. Additionally, increases in the secondary level enrollment rates are also expected.

In order to assess the possible impact of conditional education transfers' impact on academic indicators, Ministry of Education, e-school database[4] is utilized. A panel data analysis is performed investigating impact of CCTs on the academic performance and school attendance. Data relating to *school attendance* and *secondary school enrollment rates* are obtained from the database.

The reference year of the study is 2007/2008 education year. The data related to the initial year covers non-beneficiary families' children. The treatment group consists of students who are beneficiaries since 2007 up to December. The control group on the other hand consists of applicants of 2007 who had been denied assistance. Data relating to all students both beneficiaries and non – beneficiaries for the period 2007 -2010 have been compiled from the e-school database. There are 119197 students in the treatment group, and108992 students in the control group.

Analysis of the data reveals that there are students who have not been regularly attending school. In order not to increase the average number of absenteeism, the students who have more than 20 days of absenteeism are excluded from the analysis. Hence the numbers of students in treatment and control groups are 111890 and 84519, respectively. In the control group there are 43926 observations belonging to rural areas and 40593 students belonging to urban areas, constituting the general total of 84519. In the treatment group, there are 56778observations belonging to rural areas and 55112 students belonging to urban areas, constituting the general total of 111890. The distribution of the students is in line with the distribution of CCT grants across regions.

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4 e-school database is an electronic database where information related to education are being stored, belonging to the Ministry of Education.

Table 29. Distribution of Students According to NUTS Regions

NUTS	Control						Treatment						Total
	Rural	Rural (%)	Urban	Urban (%)	Total	Total (%)	Rural	Rural (%)	Urban	Urban (%)	Total	Total (%)	Total
İstanbul	53	0.12	3936	9.70	3989	4.72	27	0.05	2275	4.13	2302	2.06	6291
Western Marmara	523	1.19	1238	3.05	1761	2.08	483	0.85	576	1.05	1059	0.95	2820
Aegean	2104	4.79	3240	7.98	5344	6.32	1186	2.09	1789	3.25	2975	2.66	8319
Eastern Marmara	949	2.16	1642	4.05	2591	3.07	425	0.75	812	1.47	1237	1.11	3828
Western Anatolia	742	1.69	2368	5.83	3110	3.68	1134	2.00	3062	5.56	4196	3.75	7306
Mediterranean	2817	6.41	4380	10.79	7197	8.52	4926	8.68	8103	14.70	13029	11.64	20226
Central Anatolia	2763	6.29	2426	5.98	5189	6.14	2831	4.99	2417	4.39	5248	4.69	10437
Western Blacksea	3074	7.00	2100	5.17	5174	6.12	1196	2.11	754	1.37	1950	1.74	7124
Eastern Blacksea	3308	7.53	733	1.81	4041	4.78	1106	1.95	333	0.60	1439	1.29	5480
Northeastern Anatolia	8366	19.05	3694	9.10	12060	14.27	5113	9.01	1203	2.18	6316	5.64	18376
Centraleastern Anatolia	9975	22.71	3974	9.79	13949	16.50	16969	29.89	9337	16.94	26306	23.51	40255
Southeastern Anatolia	9252 21.06		10862	26.76	20114	23.80	21382	37.66	24451	44.37	45833	40.96	65947
Total	43926	100.00	40593	100.00	84519	100.00	56778	100.00	55112	100.00	111890	100.00	196409

Table 30. Absenteeism According to Region

NUTS	Region	Control			Treatment		
		2007/2008	2008/2009	2009/2010	2007/2008	2008/2009	2009/2010
İstanbul	Rural	4.57	4.29	5.75	3.87	3.57	4.36
	Urban	4.33	5.03	6.42	2.57	3.10	4.75
	Total	4.33	5.02	6.41	2.58	3.11	4.74
Western Marmara	Rural	4.14	4.45	5.29	3.49	3.50	3.92
	Urban	4.35	4.91	7.01	3.61	3.32	4.79
	Total	4.29	4.77	6.49	3.56	3.41	4.40
Aegean	Rural	4.61	5.11	6.45	3.03	3.18	4.54
	Urban	4.74	5.05	6.49	2.73	3.33	4.68
	Total	4.69	5.08	6.47	2.85	3.27	4.63
Eastern Marmara	Rural	4.60	5.40	6.34	3.33	3.22	3.78
	Urban	4.47	4.67	6.47	2.87	3.06	4.61
	Total	4.52	4.94	6.42	3.03	3.12	4.33
Western Anatolia	Rural	4.59	5.39	7.25	2.58	2.46	3.31
	Urban	4.52	4.99	6.62	2.49	3.00	4.43
	Total	4.54	5.07	6.73	2.51	2.85	4.12
Mediterranean	Rural	3.74	3.60	4.51	1.90	1.81	2.70
	Urban	3.83	4.32	5.66	1.86	2.12	3.00
	Total	3.80	4.05	5.24	1.87	2.00	2.88
Central Anatolia	Rural	4.55	4.99	5.58	2.68	2.70	3.44
	Urban	4.36	4.78	5.99	2.31	2.47	3.66
	Total	4.46	4.88	5.80	2.51	2.59	3.54
Western Blacksea	Rural	4.88	4.85	5.77	2.96	3.08	4.40
	Urban	4.46	5.03	5.60	2.75	3.27	4.77
	Total	4.71	4.93	5.69	2.88	3.15	4.54
Eastern Blacksea	Rural	4.42	5.13	5.44	3.09	3.45	4.11
	Urban	4.33	4.83	5.61	2.82	3.52	4.60
	Total	4.40	5.07	5.48	3.03	3.46	4.23
Northeastern Anatolia	Rural	3.88	3.74	3.95	2.59	2.61	2.99
	Urban	3.26	3.47	3.78	2.57	2.62	3.63
	Total	3.68	3.66	3.89	2.58	2.62	3.11
Centraleastern Anatolia	Rural	4.03	4.25	4.39	2.11	1.98	2.38
	Urban	4.27	4.60	5.77	2.35	2.56	3.32
	Total	4.10	4.35	4.82	2.20	2.18	2.71
Southeastern Anatolia	Rural	3.97	3.93	4.56	1.94	2.01	2.52
	Urban	4.15	4.70	5.74	1.80	2.11	3.11
	Total	4.06	4.33	5.19	1.86	2.07	2.83
Turkey	Rural	4.16	4.31	4.84	2.18	2.18	2.72
	Urban	4.19	4.65	5.84	2.10	2.40	3.43
	Total	4.17	4.47	5.36	2.14	2.28	3.07

Table 31. Absenteeism According to Gender

NUTS	Gender	Control			Treatment		
		2007/2008	2008/2009	2009/2010	2007/2008	2008/2009	2009/2010
İstanbul	Boys	4.53	5.44	6.96	2.67	3.30	5.01
	Girls	4.07	4.46	5.72	2.49	2.91	4.47
	Total	4.33	5.02	6.41	2.58	3.11	4.74
Western Marmara	Boys	4.85	5.17	7.23	3.49	3.43	4.68
	Girls	3.61	4.32	5.69	3.61	3.38	4.14
	Total	4.29	4.77	6.49	3.56	3.41	4.40
Aegean	Boys	5.04	5.71	7.04	3.07	3.43	4.99
	Girls	4.32	4.43	5.95	2.66	3.13	4.30
	Total	4.69	5.08	6.47	2.85	3.27	4.63
Eastern Marmara	Boys	4.80	5.09	6.66	3.10	3.35	4.65
	Girls	4.22	4.78	6.16	2.96	2.91	4.03
	Total	4.52	4.94	6.42	3.03	3.12	4.33
Western Anatolia	Boys	5.08	5.49	7.25	2.61	3.03	4.38
	Girls	4.01	4.70	6.31	2.42	2.69	3.89
	Total	4.54	5.07	6.73	2.51	2.85	4.12
Mediterranean	Boys	4.29	4.56	5.94	2.02	2.15	3.11
	Girls	3.25	3.50	4.51	1.73	1.84	2.66
	Total	3.80	4.05	5.24	1.87	2.00	2.88
Central Anatolia	Boys	4.84	5.36	6.24	2.65	2.70	3.77
	Girls	4.08	4.41	5.35	2.39	2.50	3.34
	Total	4.46	4.88	5.80	2.51	2.59	3.54
Western Blacksea	Boys	5.10	5.13	6.26	3.16	3.55	5.18
	Girls	4.29	4.71	5.10	2.60	2.76	3.90
	Total	4.71	4.93	5.69	2.88	3.15	4.54
Eastern Blacksea	Boys	4.70	5.50	6.15	3.17	3.57	4.39
	Girls	4.09	4.63	4.83	2.90	3.36	4.07
	Total	4.40	5.07	5.48	3.03	3.46	4.23
Northeastern Anatolia	Boys	4.07	4.27	4.69	2.70	2.75	3.31
	Girls	3.22	3.02	3.13	2.46	2.48	2.90
	Total	3.68	3.66	3.89	2.58	2.62	3.11
Centraleastern Anatolia	Boys	4.46	4.69	5.44	2.30	2.25	2.89
	Girls	3.45	3.79	4.05	2.09	2.12	2.53
	Total	4.10	4.35	4.82	2.20	2.18	2.71
Southeastern Anatolia	Boys	4.53	4.86	5.93	1.94	2.17	3.03
	Girls	3.47	3.67	4.40	1.79	1.97	2.63
	Total	4.06	4.33	5.19	1.86	2.07	2.83
Turkey	Boys	4.56	4.93	5.99	2.24	2.39	3.28
	Girls	3.69	3.95	4.69	2.04	2.18	2.86
	Total	4.17	4.47	5.36	2.14	2.28	3.07

Table 32. Secondary School Enrollment Rates According to Region

NUTS	Region	Control		Treatment	
		2008/2009	2009/2010	2008/2009	2009/2010
İstanbul	Rural	58.33	77.78	0.00	0.00
	Urban	36.98	50.94	50.00	72.31
	Total	37.40	51.35	45.45	72.31
Western Marmara	Rural	37.80	48.00	75.00	100.00
	Urban	48.62	66.67	100.00	87.50
	Total	45.25	61.93	83.33	93.33
Aegean	Rural	35.69	50.76	87.10	85.37
	Urban	42.60	54.15	74.29	74.07
	Total	39.87	52.65	80.30	78.95
Eastern Marmara	Rural	42.18	68.00	100.00	100.00
	Urban	37.01	58.01	90.00	88.89
	Total	39.23	61.94	95.24	92.86
Western Anatolia	Rural	34.15	49.56	85.71	74.07
	Urban	47.86	61.49	82.50	73.96
	Total	44.01	58.39	83.33	73.98
Mediterranean	Rural	34.89	54.72	78.95	82.80
	Urban	41.04	57.38	74.29	80.16
	Total	38.31	56.28	75.12	80.86
Central Anatolia	Rural	32.29	47.09	90.00	79.41
	Urban	43.34	55.73	62.96	74.19
	Total	36.91	50.88	74.47	76.92
Western Blacksea	Rural	26.65	37.21	76.47	83.33
	Urban	38.44	48.13	82.61	83.87
	Total	30.90	41.55	80.00	83.61
Eastern Blacksea	Rural	38.93	56.08	97.30	83.33
	Urban	39.01	51.18	100.00	100.00
	Total	38.94	55.22	97.67	86.49
Northeastern Anatolia	Rural	36.79	54.40	56.52	67.61
	Urban	46.90	66.25	90.00	78.57
	Total	39.73	57.88	62.50	69.41
Centraleastern Anatolia	Rural	35.32	54.34	79.37	77.05
	Urban	46.81	63.71	85.51	82.07
	Total	38.07	56.71	82.58	79.78
Southeastern Anatolia	Rural	28.84	44.25	79.80	72.51
	Urban	44.10	62.73	88.27	85.36
	Total	36.55	52.89	85.42	80.26
Turkey	Rural	33.95	50.92	79.38	77.07
	Urban	43.08	58.74	79.53	80.90
	Total	37.93	54.31	79.47	79.40

Table 33. Secondary School Enrollment Rates According to Gender

NUTS	Gender	Control		Treatment	
		2008/2009	2009/2010	2008/2009	2009/2010
İstanbul	Boys	35.77	52.71	33.33	71.88
	Girls	39.84	49.38	56.52	72.73
	Total	37.40	51.35	45.45	72.31
Western Marmara	Boys	42.41	60.18	85.71	83.33
	Girls	49.52	64.29	80.00	100.00
	Total	45.25	61.93	83.33	93.33
Aegean	Boys	40.72	54.48	77.27	78.05
	Girls	38.88	50.31	81.82	79.63
	Total	39.87	52.65	80.30	78.95
Eastern Marmara	Boys	39.34	64.65	87.50	83.33
	Girls	39.09	59.02	100.00	95.45
	Total	39.23	61.94	95.24	92.86
Western Anatolia	Boys	44.21	58.30	76.19	72.88
	Girls	43.75	58.49	87.88	75.00
	Total	44.01	58.39	83.33	73.98
Mediterranean	Boys	41.20	56.89	73.40	80.00
	Girls	34.75	55.53	76.47	81.67
	Total	38.31	56.28	75.12	80.86
Central Anatolia	Boys	39.38	54.04	52.94	73.53
	Girls	34.18	47.87	86.67	80.65
	Total	36.91	50.88	74.47	76.92
Western Blacksea	Boys	33.22	45.53	85.00	76.67
	Girls	28.03	37.19	75.00	90.32
	Total	30.90	41.55	80.00	83.61
Eastern Blacksea	Boys	45.01	66.05	94.12	81.82
	Girls	32.05	43.27	100.00	93.33
	Total	38.94	55.22	97.67	86.49
Northeastern Anatolia	Boys	40.24	59.33	63.64	74.47
	Girls	38.90	55.91	60.87	63.16
	Total	39.73	57.88	62.50	69.41
Centraleastern Anatolia	Boys	38.58	58.17	77.14	84.25
	Girls	36.65	53.18	88.71	74.38
	Total	38.07	56.71	82.58	79.78
Southeastern Anatolia	Boys	37.94	57.55	80.72	80.50
	Girls	34.03	44.99	91.47	80.00
	Total	36.55	52.89	85.42	80.26
Turkey	Boys	39.17	57.19	75.20	79.43
	Girls	35.95	50.08	83.49	79.36
	Total	37.93	54.31	79.47	79.40

Examination of the absenteeism data reveals that 2007/2008 academic year absenteeism rates are higher in the control group compared to the treatment group. Besides during the three years covered in the analysis the average absenteeism rates for boys and girls are higher in the control group. There has been an increase in absenteeism rates for boys and girls over the years for the control group, from 4.17 per cent in 2007 / 2008 academic to 5.36 per cent in 2009 / 2010 academic year. Similarly, even though absenteeism rates for the treatment group are lower, it has an increasing tendency, from 2.14 per cent in 2007 / 2008 academic year to 3.07 per cent in 2009 / 2010 academic year. Regarding the gender differences in absenteeism rates, boys appear to be more prone to miss school, with an overall rate higher than that of girls over the sample period. Yet there has been an increasing trend in absenteeism rates for both girls and boys (Tables 29-31).

In addition to absenteeism rates, one of the most important focal point of the study is the secondary school enrollment rates. A dummy variable, enrolment rate, which takes the value of1 for those students who enroll secondary school after completing8 years of education, and of zero otherwise, has been created. The average enrolment rate thus takes a value between zero and one. Tables 32 and 33 present the enrollment rates over the years across regions and gender, respectively. The examination of the data reveals that there is a significant difference in enrollment rates for control and treatment groups. The enrollment rate in the treatment group is higher compared to the treatment group. Additionally there has been a significant increase in the enrollment rates in 2009/2010 academic year compared to the previous academic year. Furthermore urban school enrollment rates are higher in the control group, whereas in the treatment group there is not any significant difference between the rural and urban enrollment rates. A similar observation can be made regarding the gender; boys' school enrollment rates are higher in the control group, whereas in the treatment group there is not any significant difference between the boys' and girls' enrollment rates. Giving support to positive the impact of CCT program, secondary school enrollment rates are lower in the control group compared to the treatment group. Overall, descriptive analysis indicates that CCT program has been effective achieving school attendance and secondary school enrollment.

7.2. Empirical Results

7.2.1. Impact of CCT Program on Absenteeism

The double difference approach has been employed to investigate the impact of CTs on school attendance in a panel data analysis framework, which can be represented as

$$Y_{it} = \alpha_0 + \beta_1 A_{1,it} + \beta_2 A_{2,it} + \beta_3 D_{it} + \delta_1 A_{1,it} D_{it} + \delta_2 A_{2,it} D_{it} + \varepsilon_{it}$$

Y_{it} Where i denotes individuals and t time,
A_1 Dummy variable for the academic year 2008/2009
A_2 Dummy variable for the academic year 2009/2010
T Dummy variable for the students in the treatment group
Urban = Dummy variable for the students who live in the urban areas
ε = error term

Table 34. Determinants of Absenteeism: Regression Results – Models I - III

Explanatory Variables	Model I	Model II	Model III
Constant	4.171* (202.841)	4.558* (106.558)	4.155* (98.376)
DUM2009	0.304* (9.273)	0.369* (5.785)	0.152* (2.403)
DUM2010	1.186* (29.999)	1.432 (19.298)*	0.682* (9.453)
Treatment Group(T)	-2.030* (-89.081)	-2.318* (-51.178)	-1.971* (-44.315)
DUM2009*T	-0.161* (-4.510)	-0.217* (-3.214)	-0.159* (-2.407)
DUM2010*T	-0.261* (-6.117)	-0.396* (-5.074)	-0.141** (-1.877)
Gender	-	-0.864* (-19.867)	-
Gender*T	-	0.668* (13.979)	-
Gender*DUM2009	-	-0.115** (-1.684)	-
Gender*DUM2010	-	-0.435* (-5.290)	-
Gender*T*DUM2009	-	0.095 (1.276)	-
Gender*T*DUM2010	-	0.215* (2.436)	-
Urban	-	-	0.033 (0.659)
Urban*DUM2009	-	-	0.310* (4.042)
Urban*DUM2010	-	-	0.969* (10.946)
T*urban	-	-	-0.120** (-2.233)
Urban*T*DUM2009	-	-	-0.003 (-0.041)
Urban*T*DUM2010	-	-	-0.180** (-1.912)
F Statistics	5337.042*	2644.533*	2557.419*
F Statistics P Value	0.000	0.000	0.000

Values in parentheses are t statistics and values in brackets are p values. *, **, *** denotes significance at1, 5 and 10 per cent level.

Table 35. Determinants of Absenteeism: Regression Results Models IV - V

Explanatory Variables	Model IV	Model V
C	4.333* (43.922)	4.917* (7.619)
DUM2009	0.684* (4.550)	-0.629 (-0.690)
DUM2010	2.078* (12.993)	0.833 (0.695)
URBAN	-	-0.592 (-0.914)
T	-1.751* (-13.978)	-1.641* (-12.077)
NUTS2	-0.043 (-0.224)	-0.783 (-1.133)
NUTS3	0.355* (2.733)	-0.220 (-0.336)
NUTS4	0.188 (1.273)	-0.266 (-0.401)
NUTS5	0.204*** (1.393)	-0.372 (-0.561)
NUTS6	-0.537* (-4.377)	-1.167** (-1.790)
NUTS7	0.126 (0.937)	-0.350 (-0.533)
NUTS8	0.381* (2.791)	-0.080 (-0.122)
NUTS9	0.071 (0.524)	-0.491 (-0.749)
NUTS10	-0.653* (-5.620)	-1.116** (-1.724)
NUTS11	-0.236** (-2.048)	-0.907*** (-1.397)
NUTS12	-0.269* (-2.477)	-0.863*** (-1.330)
T* DUM2009	-0.156 (-0.823)	0.922 (0.724)
T *DUM2010	0.081 (0.398)	0.255 (0.193)
T*URBAN	-	-0.110** (-1.835)
NUTS2*URBAN	-	0.813 (1.180)
NUTS3*URBAN	-	0.577 (0.875)
NUTS4*URBAN	-	0.383 (0.572)
NUTS5*URBAN	-	0.582 (0.878)
NUTS6*URBAN	-	0.667 (1.024)
NUTS7*URBAN	-	0.366 (0.556)
NUTS8*URBAN	-	0.286 (0.431)
NUTS9*URBAN	-	0.473 (0.702)
NUTS10*URBAN	-	0.223 (0.339)

Table 35. Determinants of Absenteeism: Regression Results Models IV - V (Continued)

NUTS11*URBAN	-	0.916*** (1.407)
NUTS12*URBAN	-	0.611 (0.939)
URBAN*DUM2009	-	1.332*** (1.452)
URBAN*DUM2010	-	1.263 (1.047)
NUTS2*DUM2009	-0.200 (-0.684)	0.942 (0.932)
NUTS2*DUM2010	0.122 (0.363)	0.328 (0.252)
NUTS3*DUM2009	-0.295*** (-1.469)	1.044 (1.124)
NUTS3*DUM2010	-0.293*** (-1.327)	0.919 (0.755)
NUTS4*DUM2009	-0.268 (-1.178)	1.379*** (1.444)
NUTS4*DUM2010	-0.179 (-0.705)	0.856 (0.693)
NUTS5*DUM2009	-0.150 (-0.657)	1.478*** (1.537)
NUTS5*DUM2010	0.118 (0.461)	1.875 (1.465)
NUTS6*DUM2009	-0.427** (-2.267)	0.482 (0.521)
NUTS6*DUM2010	-0.630* (-3.013)	-0.071 (-0.058)
NUTS7*DUM2009	-0.260 (-1.271)	1.051 (1.130)
NUTS7*DUM2010	-0.741* (-3.251)	0.184 (0.150)
NUTS8*DUM2009	-0.471** (-2.281)	0.643 (0.693)
NUTS8*DUM2010	-1.097* (-4.571)	0.098 (0.080)
NUTS9*DUM2009	-0.019 (-0.088)	1.329*** (1.427)
NUTS9*DUM2010	-1.005* (-4.241)	0.183 (0.151)
NUTS10*DUM2009	-0.705* (-3.939)	0.573 (0.626)
NUTS10*DUM2010	-1.868* (-9.505)	-0.688 (-0.570)
NUTS11*DUM2009	-0.429* (-2.426)	0.872 (0.950)
NUTS11*DUM2010	-1.351* (-6.829)	-0.452 (-0.374)
NUTS12*DUM2009	-0.419* (-2.484)	0.506 (0.552)
NUTS12*DUM2010	-0.948* (-4.999)	-0.325 (-0.267)
T*NUTS2	1.017* (4.103)	1.003* (3.988)
T*NUTS3	-0.087 (-0.522)	-0.131 (-0.779)

T*NUTS4	0.261*** (1.335)	0.230 (1.171)
T*NUTS5	-0.276*** (-1.583)	-0.307** (-1.752)
T*NUTS6	-0.172 (-1.167)	-0.214*** (-1.443)
T*NUTS7	-0.197 (-1.211)	-0.260*** (-1.577)
T*NUTS8	-0.085 (-0.475)	-0.157 (-0.864)
T*NUTS9	0.378** (2.063)	0.299*** (1.592)
T*NUTS10	0.654* (4.471)	0.516* (3.397)
T*NUTS11	-0.149 (-1.065)	-0.248** (-1.725)
T*NUTS12	-0.448* (-3.334)	-0.499* (-3.677)
T*URBAN*DUM2009	-	-1.093 (-0.858)
T*URBAN*DUM2010	-	-0.179 (-0.135)
NUTS2*DUM2009*T	-0.478*** (-1.289)	-1.228 (-0.902)
NUTS2*DUM2010*T	-1.442* (-3.480)	-0.996 (-0.699)
NUTS3*DUM2009*T	0.189 (0.740)	-1.079 (-0.836)
NUTS3*DUM2010*T	-0.091 (-0.321)	-0.389 (-0.290)
NUTS4*DUM2009*T	-0.172 (-0.576)	-1.690 (-1.280)***
NUTS4*DUM2010*T	-0.686** (-2.056)	-1.405 (-1.024)
NUTS5*DUM2009*T	-0.036 (-0.134)	-1.908*** (-1.456)
NUTS5*DUM2010*T	-0.666** (-2.205)	-2.254*** (-1.614)
NUTS6*DUM2009*T	0.025 (0.110)	-0.858 (-0.669)
NUTS6*DUM2010*T	-0.520** (-2.085)	-0.211 (-0.158)
NUTS7*DUM2009*T	-0.186 (-0.757)	-1.313 (-1.020)
NUTS7*DUM2010*T	-0.387*** (-1.421)	-0.497 (-0.370)
NUTS8*DUM2009*T	0.218 (0.805)	-0.896 (-0.693)
NUTS8*DUM2010*T	0.599** (1.953)	0.175 (0.129)
NUTS9*DUM2009*T	-0.076 (-0.266)	-1.260 (-0.972)
NUTS9*DUM2010*T	0.041 (0.130)	-0.247 (-0.184)
NUTS10*DUM2009*T	0.210 (0.943)	-0.928 (-0.725)
NUTS10*DUM2010*T	0.234 (0.958)	-0.088 (-0.066)

Table 35. Determinants of Absenteeism: Regression Results Models IV - V (Continued)

NUTS11*DUM2009*T	-0.110 (-0.513)	-1.306 (-1.022)
NUTS11*DUM2010*T	-0.293 (-1.232)	-0.373 (-0.280)
NUTS12*DUM2009*T	0.092 (0.448)	-0.699 (-0.548)
NUTS12*DUM2010*T	-0.244 (-1.062)	-0.160 (-0.119)
NUTS3*DUM2010*T*URBAN	-	0.387 (0.285)
Values in parentheses are t statistics and values in brackets are p values. *, **, *** denotes significance at1, 5 and 10 per cent level.		

The parameter represents δ_1 the impact of CCT program in 2007/2008 academic year compared to2008/2009 academic year. Similarly δ_2 represents the impact of CCT program in 2008/2009 academic year compared to2009/2010 academic year. When the above equation is estimated a hypothesis test investigating if δ_1 and δ_2 are statistically different from zero is undertaken. If they are statistically significant and less than 1, then we can conclude that CCTs have a positive impact on attendance. The estimation results for four alternative specification of test model are presented in Table34. Model I presents the estimation results for Turkey. Whereas Model II and Model III present the estimation results takinggender and rural / urban difference into account, respectively. The estimation results of Model I indicate positive impact of CCT program on absenteeism for overall Turkey. The model tries to capture the impact of CCT program on absenteeism by including interaction dummy variables DUM2009*T andDUM2010*T, the coefficients of which are negative and statistically significant. Thus compared to 2007/2008 academic year, there has been a decrease in absenteeism in both 2008/2009 and 2009/2010 academic years, which can be attributed to the success of CCT programs.

A statistically significant negative value of the parameter of the treatment group dummy variable (T) suggests that compared to the control group treatment group has a lower absenteeism rate. The impact of CCT program on average absenteeism for both treatment and control groups, according to NUTS regions and time can be computed by using this information. For example for 2008/2009 academic year the impact of CCT program on average absenteeism for control group can be calculated as the sum of the coefficients of variables DUM2009*T and DUM2009*T as (0.304-2.030-0.161= -1.887). Similarly, for 2008/2009 academic year the deviation of control group's absenteeism rate from the average is given by the coefficient of DUM2009 variable which is (0.304). Accordingly, the deviations from the mean values are calculated over the years and for both treatment and control groups, which are provided in Table 36. The empirical results indicate that CCT program improves the average absenteeism rate, as the rate is lower for the treatment compared to the control group for both academic years.

Table 36. Deviation from the Mean: Turkey

Academic Year	Treatment	Control
2008/2009	-1.887	0.304
2009/2010	-1.105	1.186

Model II examines the impact of CCT program on absenteeism rate taking gender differences into account. All coefficients of the model except gender*T*DUM2009 are statistically significant at 1 per cent level of significance. A statistically significant negative value (-0.864) of gender coefficient indicates that the absenteeism rate for girls are lower than that of boys. Additionally the impact of CCT program also differs across gender, as the coefficient of (gender*T) variable is statistically significant. Yet this gender difference is only valid for 2009/2010academic year. As in the previous model the deviation from the mean absenteeism values for girls can be computed for both treatment and control group, which are presented in Table 37. It emerges that girls' average absenteeism rate is lower than that of boys for both groups. The deviations from the mean values are negative for girls for both groups except for the control group in 2009 / 2010 academic year.

Table 37. Deviation from the Mean: Gender Differences

Academic Year	Treatment		Control	
	Boys	Girls	Boys	Girls
2008/2009	-2.165	-2.381	0.369	-0.609
2009/2010	-1.282	-1.698	1.432	0.133

Model III investigates if there is any difference in the impact of CCT program across rural – urban regions. The coefficient of the dummy variable urban is not statistically significant, suggesting that there is not any significant difference in the impact of CCT program regarding urban- rural distinction for Turkey general. However all interaction dummies except (T*Urban*DUM2009) are statistically significant, suggesting that even though there is no impact differential, there may be differential effect regarding time and gender. There has been an increase in absenteeism rate in urban areas compared to rural areas in 2008/2009 and 2009/2010 academic years. Empirical evidence supports the positive impact of CCT program in urban areas as the coefficient of the (T*Urban) interaction dummy is statistically significant and negative. The estimation results in Model III enable the researcher to calculate the deviation from the mean values for absenteeism in urban and rural areas, which is presented in Table 38. Negative values of deviation from the mean statistics for the treatment group indicate that CCT program has been effective in both rural and urban areas for both academic years. Additionally absolute deviations are greater in rural areas compared to urban areas for the treatment group, suggesting the powerful impact of CCT program especially in the rural parts of Turkey.

Table 38. Deviation from the Mean: Rural / UrbanDifferences

Academic Year	Treatment		Control	
	Rural	Urban	Rural	Urban
2008/2009	-1.979	-1.760	0.152	0.494
2009/2010	-1.431	-0.729	0.682	1.683

Additionally the impact of CCT program on absenteeism across NUTS regions has also been considered (Table 35). The empirical results show that there is not a statistically significant differential impact of CCT program across NUTS regions. However statistically significant differential effects have been observed in some NUTS regions in academic year 2009 / 2010. These regions are Western Marmara, Eastern Marmara, Western Anatolia, Mediterranean and Western Blacksea. The differential impact in Western Blacksea is positive, whereas the differential impact is negative for other regions. This result suggests that compared to the initial 2009/2010academic year, there has been a decline in average absenteeism rate in Western Marmara, Eastern Marmara, Western Anatolia and Mediterranean regions. The deviations from the average absenteeism rates for this model are provided in Table 39. Overall the positive effects of CCT program is more pronounced in Mediterranean region in2009. When the results pertaining to2009 and 2010 are assessed together, CCTs positively impact absenteeism rates in Mediterranean, Northeastern Anatolia, Centraleastern Anatolia and Southeastern Anatolia regions.

Table 39. Deviation from the Mean: NUTS Regions

NUTS Region	Treatment		Control	
	2008/2009	2009/2010	2008/2009	2009/2010
İstanbul	-1.22	0.41	0.68	2.08
Western Marmara	-0.93	0.06	0.44	2.16
Aegean	-1.06	0.29	0.74	2.14
Eastern Marmara	-1.21	0.01	0.60	2.09
Western Anatolia	-1.48	-0.21	0.74	2.40
Mediterranean	-2.33	-1.45	-0.28	0.91
Central Anatolia	-1.74	-0.79	0.55	1.46
Western Blacksea	-1.18	0.21	0.59	1.36
Eastern Blacksea	-0.87	-0.11	0.74	1.14
Northeastern Anatolia	-1.72	-1.22	-0.67	-0.44
Centraleastern Anatolia	-2.15	-1.62	0.02	0.49
Southeastern Anatolia	-2.27	-1.50	0.00	0.86

7.2.2. Impact of CCT Program on Secondary School Enrollment

Following attendance, impact of CCTs on the secondary school enrolment rates will be investigated within the same framework. A dummy variable is created which takes the value of 1 for those who graduate from primary school in 2008 and enroll secondary school in 2008 / 2009 academic year. Another similar dummy variable is created for 2009 / 2010 academic year. Hence a pooled data set covering two consecutive academic years is created.

The impact of CCT program on secondary school enrollment is examined within the logistic regression framework:

$$Ln\left[\frac{P_{it}}{1-P_{it}}\right] = \alpha_0 + \beta_1 D_{it} + \beta_2 C_{it} + \beta_3 YD_{it} + \sum_{j=1}^{11} \theta_j B_{j,it} + \delta_1 C_{it} D_{it} + \delta_2 YD_{it} D_{it} + \varepsilon_{it}$$

Where i denotes individuals and t time:

P_{it}: *dummy variable taking thvalus of 1 of 1 if individual i enrolled in secondary school in year t*

T:Dummy variable fort he treatment group
Gender: Dummy variable for gender taking the value of one for girls.
Urban: Dummy variable taking the value of 1 for rural areas.
$NUTS_i$: NUTS regional dummies i=1,.....12.
ε=error term

If β_1 is statistically significant positive parameter we conclude that CCT program improves the secondary school enrollment rates. δ_1 on the other hand captures the differential effect regarding gender. Additionally, time and regional dummy variables are also included in the estimated equation.

There are 1023 observations in the treatment group and 14921 observations in the control group, respectively for 2008/2009academic year. There are 1723 observations in the treatment group and 12354 observations in the control group, respectively for 2009/2010 academic year. In order to investigate the impact of CCT program on secondary school enrollment, a pooled data estimation has been carried out where the dependent variable is the enrollment rate, a dummy variable taking the value of 1 for those who enroll secondary school and 0 otherwise. Alternative specifications have been considered.

Table 40. Estimation Results

Explanatory Variables	Model I	Model II	Model III	Model IV	Model V
Constant	-0.337* (-20.650)	-0.665* (-28.920)	-0.216* (-10.520)	-0.564* (-19.720)	-0.515* (-6.180)
T	1.598* (21.110)	2.014* (15.780)	1.394* (13.810)	1.663* (10.030)	0.333 (1.060)
YEAR	-	0.702* (21.150)	-	0.762* (18.150)	0.569* (4.860)
Gender	-	-	-0.326* (-9.570)	-0.280* (-5.800)	-
Urban	0.344* (13.990)	0.387* (11.380)	0.247* (7.820)	0.289* (6.680)	-
NUTS2	-	-	-	-	0.324** (2.170)
NUTS3	-	-	-	-	0.104 (0.980)
NUTS4	-	-	-	-	0.077 (0.620)
NUTS5	-	-	-	-	0.274** (2.330)
NUTS6	-	-	-	-	0.039 (0.380)
NUTS7	-	-	-	-	-0.021 (-0.200)
NUTS8	-	-	-	-	-0.290* (-2.720)
NUTS9	-	-	-	-	0.065 (0.600)
NUTS10	-	-	-	-	0.098 (1.040)
NUTS11	-	-	-	-	0.029 (0.310)
NUTS12	-	-	-	-	-0.037 (-0.400)
T*Urban	-0.194** (-1.960)	-0.378** (-2.320)	-0.104 (-0.770)	-0.271 (-1.250)	-
T*Year	-	-0.838* (-5.280)	-	-0.639* (-3.050)	0.573*** (1.340)
Urban*Year	-	-0.070*** (-1.400)	-	-	-
Gender*Year	-	-	-	-0.136** (-1.960)	-
T*Gender	-	-	0.509* (3.330)	0.843* (3.220)	-

Table 40. Estimation Results (Continued)

Urban*Gender	-	-	0.267* (5.280)	0.272* (3.870)	-
Urban*Year	-	-	-	-0.066 (-1.020)	-
T*NUTS2	-	-	-	-	1.467** (1.740)
T*NUTS3	-	-	-	-	1.483* (3.330)
T*NUTS4	-	-	-	-	3.101* (2.880)
T*NUTS5	-	-	-	-	1.517* (3.100)
T*NUTS6	-	-	-	-	1.249* (3.500)
T*NUTS7	-	-	-	-	1.274* (2.750)
T*NUTS8	-	-	-	-	1.858* (3.650)
T*NUTS9	-	-	-	-	3.855* (3.630)
T*NUTS10	-	-	-	-	0.595*** (1.410)
T*NUTS11	-	-	-	-	1.709* (4.370)
T*NUTS12	-	-	-	-	1.987* (5.570)
YEAR*NUTS2	-	-	-	-	0.108 (0.480)
YEAR*NUTS3	-	-	-	-	-0.052 (-0.340)
YEAR*NUTS4	-	-	-	-	0.356** (1.950)
YEAR*NUTS5	-	-	-	-	0.010 (0.060)
YEAR*NUTS6	-	-	-	-	0.160 (1.100)
YEAR*NUTS7	-	-	-	-	0.002 (0.020)
YEAR*NUTS8	-	-	-	-	-0.106 (-0.700)

Table 40. Estimation Results (Continued)

YEAR*NUTS9	-	-	-	-	0.090 (0.580)
YEAR*NUTS10	-	-	-	-	0.165 (1.220)
YEAR*NUTS11	-	-	-	-	0.187*** (1.440)
YEAR*NUTS12	-	-	-	-	0.098 (0.760)
URBAN*YEAR*T	-	0.292*** (1.420)	-	0.278 (1.000)	-
URBAN*GENDER*T	-	-	-0.274*** (-1.370)	-0.353 (-1.060)	-
YEAR*GENDER*T	-	-	-	-0.448*** (-1.380)	-
URBAN*GENDER*YEAR	-	-	-	-0.012 (-0.110)	-
T*NUTS3	-	-	-	-	1.483* (3.330)
T*NUTS4	-	-	-	-	3.101* (2.880)
T*NUTS5	-	-	-	-	1.517* (3.100)
T*NUTS6	-	-	-	-	1.249* (3.500)
T*NUTS7	-	-	-	-	1.274* (2.750)
T*NUTS8	-	-	-	-	1.858* (3.650)
T*NUTS9	-	-	-	-	3.855* (3.630)
T*NUTS10	-	-	-	-	0.595*** (1.410)
T*NUTS11	-	-	-	-	1.709* (4.370)
T*NUTS12	-	-	-	-	1.987* (5.570)
YEAR*NUTS8	-	-	-	-	-0.106 (-0.700)

Table 40. Estimation Results (Continued)

YEAR*NUTS9	-	-	-	-	0.090 (0.580)
YEAR*NUTS10	-	-	-	-	0.165 (1.220)
YEAR*NUTS11	-	-	-	-	0.187*** (1.440)
YEAR*NUTS12	-	-	-	-	0.098 (0.760)
URBAN*YEAR*T	-	0.292*** (1.420)	-	0.278 (1.000)	-
URBAN*GENDER*T	-	-	-0.274*** (-1.370)	-0.353 (-1.060)	-
YEAR*GENDER*T	-	-	-	-0.448*** (-1.380)	-
URBAN*GENDER*YEAR	-	-	-	-0.012 (-0.110)	-
URBAN*GENDER*YEAR*T	-	-	-	0.097 (0.230)	-
T*YEAR*NUTS2	-	-	-	-	-0.220 (-0.160)
T*YEAR*NUTS3	-	-	-	-	-1.173** (-1.980)
T*YEAR*NUTS4	-	-	-	-	-1.929*** (-1.440)
T*YEAR*NUTS5	-	-	-	-	-1.717* (-2.810)
T*YEAR*NUTS6	-	-	-	-	-0.966** (-2.000)
T*YEAR*NUTS7	-	-	-	-	-1.011*** (-1.620)
T*YEAR*NUTS8	-	-	-	-	-0.794 (-1.160)

Table 40. Estimation Results (Continued)

T*YEAR*NUTS9	-	-	-	-	-3.113* (-2.590)
T*YEAR*NUTS10	-	-	-	-	-0.999** (-1.770)
T*YEAR*NUTS11	-	-	-	-	-1.513* (-2.960)
T*YEAR*NUTS12	-	-	-	-	-1.606* (-3.390)
Wald Test (χ^2)	1187.93* [0.000]	1896.17* [0.000]	1275.50* [0.000]	1995.96* [0.000]	1837.65* [0.000]
Values in parentheses are t statistics and values in brackets are p – values. *, **, *** denotes significance at1, 5 and 10 per cent level.					

The first model in column II in Table 40 examines if there is any difference in school enrollment regarding rural – urban residency. A statistically significant positive value for transfers (T) indicates that there is a positive impact from CCTs on secondary school enrollment. A statistically significant value for urban dummy indicates that the impact of CCT program differs according to residency. Students living in the urban areas are more likely to enroll secondary schools after completing 8 years of education. Moreover a statistically significant interaction term suggests that the impact also differs for treatment and control groups. From these estimations one can calculate the probability of secondary school enrolment P (Y=1):

$$P(Y = 1) = \frac{1}{1 + e^{-\beta X}}$$

Accordingly probabilities for secondary school enrollment for rural and urban areas are calculated and presented in Table 41. There is a marked difference between the probabilities belonging to treatment and control groups in that the probabilities are higher in treatment group in both cases. Moreover probability of enrollment is higher for urban areas compared to the rural areas.

Table 41. Probabilities for Enrollment: Residency

	Treatment	Control
Rural	0.779	0.416
Urban	0.804	0.502

Model II investigates the issue by taking time dimension into account, by including year- residency interaction dummy variables. Since the coefficients of interaction dummies are not statistically significant, there is not any difference in the effect over the years. The probabilities for enrollment from Model II are provided in Table 42. It emerges that the probabilities are higher in treatment group for both academic years. Moreover, probability of enrollment is higher for urban areas compared to the rural areas. Even though the probability of enrollment for urban areas increased marginally from 2008 / 2009 academic year to 2009 / 2010 academic year, there has been a reduction in the probability of enrollment for rural areas in 2009 / 2010 academic year.

Table 42. Probabilities for Enrollment: Academic Years

	Treatment		Control	
	2008/2009	2009/2010	2008/2009	2009/2010
Rural	0.794	0.771	0.340	0.509
Urban	0.795	0.809	0.431	0.587

Model III investigates the issue from a gender perspective. Even though the coefficient of gender is negative, when gender CCT interaction is taken into account it turns out to be positive. Thus boys are more prone to secondary school enrollment in general. However when CCT program is introduced, girls in the treatment group are more likely to continue their education compared to boys. The probabilities from this model are presented in Table 43. The probabilities are higher for the treatment group supporting the effectiveness of CCT program. The probabilities for secondary school enrollment are higher for boys in the control group, whereas the probabilities are higher for girls in the treatment group, especially in the urban areas.

Table 43. Probabilities for Enrollment: Gender

	Gender	Treatment	Control
Rural	Boys	0.764	0.446
	Girls	0.796	0.368
Urban	Boys	0.789	0.508
	Girls	0.817	0.493

Model IV investigates the impact of CCT program on school enrollment taking time dimension into account, with a Treatment/Control and gender distinction. In this model coefficients of the variables T, gender, urban and year are found to be statistically significant, indicating that these factors affect the probability. The probabilities from this model are presented in Table 44. The probability of continuing secondary school is higher for treatment group for both years, with little variation in each year. However there has been an increase in enrollment probabilities for students in the control group.

Table 44. Probabilities for Enrollment: Time & Gender

		Treatment		Control	
		2008/2009	2009/2010	2008/2009	2009/2010
Rural	Boys	0.750	0.772	0.363	0.549
	Girls	0.840	0.769	0.301	0.479
Urban	Boys	0.753	0.810	0.432	0.604
	Girls	0.832	0.808	0.430	0.566

Model V presents the results taking the NUTS regional classification into account over the years. Empirical results indicate that there is a marked difference regarding the NUTS regional classification. Especially impact of CCT program differs regionally. The probabilities calculated for this specification are provided in Table 45. It emerges that the school enrollment probabilities for İstanbul region is lower compared to other regions for treatment group. Generally for all regions probabilities for treatment group are higher than that of control group

Table 45. Probabilities for Enrolment: Time & NUTS Regions

	Treatment		Control	
	2008/2009	2009/2010	2008/2009	2009/2010
İstanbul	0.455	0.723	0.374	0.514
Western Marmara	0.833	0.933	0.452	0.619
Aegean	0.803	0.789	0.399	0.526
Eastern Marmara	0.952	0.929	0.392	0.619
Western Anatolia	0.833	0.740	0.440	0.584
Mediterranean	0.751	0.809	0.383	0.563
Central Anatolia	0.745	0.769	0.369	0.509
Western Blacksea	0.800	0.836	0.309	0.416
Eastern Blacksea	0.977	0.865	0.389	0.552
Northeastern Anatolia	0.625	0.694	0.397	0.579
Centraleastern Anatolia	0.826	0.798	0.381	0.567
Southeastern Anatolia	0.854	0.803	0.365	0.529

Overall empirical results indicate that the CCT program has a positive impact on both school attendance and secondary school enrollment rate.

7.3. McNemar Paired Tests

The paired t-test is used to test for a difference in the mean response, but is appropriate only for continuous data. McNemar's test can be used when the paired responses take on 2 possible values (Yes-No, 0-1, T-F, Success-Fail, etc.). For each subject, 2 binary variables are measured. Suppose a

new policy has been introduced. The effectiveness of this policy can be assessed by having a pre-test and post-test for a random sample of subjects. The observations in both groups can be paired and represented in a data set as observations (X_1, Y_1), (X_2, Y_2),..., (X_n, Y_n) and hence these observations become interdependent.

2011 Data (pretest)			
2012 Data(posttest)	Yes	No	Total
Yes	A	B	A+B
No	C	D	C+D
Total	A+C	B+D	n

Where
n is the sampling size
A: number of people who reports an impact for both 2011 and 2012
B: number of people who reports an impact for 2012 but not for 2011
C: number of people who reports an impact for 2011 but not for 2012
D:number of people who reports no impact for both 2011 and 2012.

Sample size for those who report an impact in 2011: $p_{11} = \dfrac{A+C}{n}$

Sample size for those who report an impact in 2012: $p_{12} = \dfrac{A+B}{n}$

While the null hypothesis is , $Ho: \pi_{11}=\pi_{12}$ alternative hypotheses can be both single and double sided:

$$H_1: \pi_{11} > \pi_{12} \quad H_1: \pi_{11} < \pi_{12} \quad H_1: \pi_{11} \neq \pi_{12}$$

McNemar Z- statistics is calculated as: $Z_h = \dfrac{B-C}{\sqrt{B+C}}$

The results of the McNemar Paired Tests (Table 46) reveal that awareness about the CCT program has increased since 2011. Additionally, there has been a decline in the number of the children under 18 years of age who is working. The respondents in both the treatment and control groups are in favor of female employment. Besides beneficiaries report that they have easier access to healthcare services since the start of the CCT program.

Table 46. McNemar Paired Tests

Question	Treatment	Control
	Z statistics	Z statistics
Do you think the beneficiaries are selected fairly?	8.879 (0.000)	-9.481 (0.000)
Do you know that secondary level students receive more CCT than primary level students?	8.960 (0.000)	2.879 (0.000)
Do you know that girls receive more grants compared to boys?	-7.65 (0.000)	0.736 (0.000)
Do you have children under 18 who is a paid employee?	0.356 (0.360)	2.167 (0.015)
Do you think it is important for women participating in employment?	3.1720 (0.008)	-0.298 (0.382)
Do you think girls should go to school?	1.483 (0.069)	3.092 (0.001)
Do you think boys should go to school?	0.600 (0.274)	2.160 (0.015)
For beneficiaries		
Would you send your daughters to schools in the absence of CCTs?		0.4417 (0.329)
Would you send your sons to schools in the absence of CCTs?		1.309 (0.095)
Do you have any difficulties in the process of receiving education transfers?		0.486 (0.312)
Do you have any difficulties in the process of receiving health transfers?		0.583 (0.279)
Have you taken your children for medical visits before the CCT program even when they were not ill?		5.023 (0.000)
After being eligible for health transfers do you take your children to health care centers regularly?		2.614 (0.004)
Both Groups		
Do you have any difficulties in access to healthcare services?	0.267 (0.394)	-3.302 (0.005)
Do you take your children for medical visits even when they are not ill?	1.923 (0.027)	

7.4. Consumer Satisfaction with Healthcare Services: Linear Regression Model

In both surveys satisfaction with healthcare services provided by General Practitioners and Local Health Care Centers have been measured. The respondents were asked if they agree with the statement "I am satisfied with the way health care services are delivered". The answers strongly agree = 5, agree = 4, neutral=3, not agree = 2 and strongly disagree =1 are designed according to Likert scale. Average satisfaction scores from 2011 and 2012 surveys are presented in Table 47 for both treatment and the control groups.

Table 47. Average Satisfaction with the Health Care Services

CONTROL						
	2011			2012		
NUTS Regions	Rural	Urban	Total	Rural	Urban	Total
İstanbul	-	3.94	3.94	-	4.14	4.14
Western Marmara	3.80	4.00	3.85	4.14	3.00	3.80
Aegean	4.66	4.74	4.72	3.90	3.93	3.92
Eastern Marmara	4.86	4.22	4.35	4.14	3.56	3.81
Western Anatolia	4.60	4.19	4.24	4.00	3.90	3.91
Mediterranean	4.13	4.15	4.14	3.81	3.91	3.86
Central Anatolia	4.08	4.73	4.21	3.68	4.00	3.71
Western Blacksea	4.55	4.33	4.42	3.69	3.92	3.81
Eastern Blacksea	4.15	4.20	4.17	4.32	4.15	4.27
Northeastern Anatolia	4.20	4.23	4.20	4.27	4.00	4.22
Centraleastern Anatolia	4.00	4.42	4.13	4.27	3.82	4.09
Southeastern Anatolia	3.82	3.97	3.93	4.00	3.76	3.82
Total	4.21	4.27	4.25	4.03	3.88	3.94
TREATMENT						
	2011			2012		
NUTS Regions	Rural	Urban	Total	Rural	Urban	Total
İstanbul	-	3.80	3.80	-	-	-
Western Marmara	3.90	4.02	3.97	4.15	4.00	4.05
Aegean	4.75	4.69	4.71	4.08	4.07	4.08
Eastern Marmara	3.86	4.44	4.26	3.75	3.80	3.78
Western Anatolia	4.80	4.48	4.57	3.89	3.77	3.79
Mediterranean	3.67	3.93	3.84	3.92	4.02	3.97
Central Anatolia	4.44	4.67	4.47	3.55	3.31	3.51
Western Blacksea	3.94	4.20	4.00	3.64	3.68	3.66
Eastern Blacksea	4.42	4.35	4.39	4.08	4.00	4.05
Northeastern Anatolia	4.33	4.39	4.34	4.27	4.23	4.26
Centraleastern Anatolia	4.01	4.39	4.07	4.31	3.91	4.22
Southeastern Anatolia	3.74	3.97	3.87	4.16	4.06	4.10
Total	4.13	4.26	4.18	4.10	3.95	4.03

Overall, healthcare services satisfaction is higher in urban areas in 2011 for both control and treatment groups compared to the rural areas. However, in 2012 satisfaction is higher in rural areas. Besides, overall satisfaction declines for both groups in 2012. Especially the reduction in satisfaction is notable for urban areas. When interregional differences are investigated, it emerges that average satisfaction for control group increased in rural parts of Western Marmara, Eastern Blacksea, Northeastern Anatolia, Centraleastern Anatolia and Southeastern Anatolia regions. Yet the score has not shown any increase for urban areas. On the other hand, in rural parts of Western Marmara, Mediterranean, Centraleastern Anatolia and Southeastern Anatolia satisfaction score increased

for treatment group. For the urban areas the only regions for which the satisfaction score increased are Mediterranean and Southeastern Anatolia regions. The highest decrease in average satisfaction score has been observed in Aegean and Western Blacksea for control group; and Western Anatolia and Central Anatolia for the treatment group.

This section explores the determinants of satisfaction with health care services utilizing survey data and employing regression analysis. Two alternative specifications are considered where the dependent variable is the satisfaction point (M).

Model I: $M = \alpha_0 + \beta_1 YEAR + \beta_2 * T + \delta_1 YEAR * T + \varepsilon$

Model II:

$$M = \alpha_0 + \beta_1 YEAR + \beta_2 T + \delta_1 YEAR * T + \beta_3 URBAN + \delta_2 YEAR(URBAN) + \delta_3 T * (URBAN) + \delta_4 YEAR * T * (URBAN) + \varepsilon$$

Table 48. Estimation Results for Satisfaction: Model I - Model II

Variables	Model I	Model II
Constant	4.246* (205.504)	4.206* (123.990)
YEAR	-0.306* (-9.585)	-0.171* (-3.304)
T	-0.063* (-1.996)	-0.074** (-1.623)
YEAR*T	0.155* (3.71)	0.135* (2.046)
URBAN	-	0.063 (1.478)
YEAR*URBAN	-	-0.217* (-3.301)
T*URBAN	-	0.064 (0.988)
YEAR*T* URBAN	-	-0.052 (-0.574)
F-statistics	38.882*	21.206*
(p- value)	[0.000]	[0.000]
Values in parentheses are t statistics and values in brackets are p values. *, ** denotes significance at5 and 10 per cent level.		

Model I investigates the impact of CCT program on health care services satisfaction (Table 48). The model is statistically significant as a whole. The coefficient of variable T (control or treatment group) is negative, indicating that the level of satisfaction with health care services is lower for treatment group compared to the control group. The year dummy variable is also negative suggesting that there has been a reduction in the overall satisfaction level in 2012 compared to the previous year. The interaction term T*Group capturing the differential time impact for the treatment group is positive and statistically significant. This finding indicates that CCT beneficiaries' level of satisfaction with health care services has increased even though there has been a reduction in the overall level of satisfaction. Model-II considers the impact of CCT program on health care services level of satisfaction with respect to the residency. As the coefficient of urban variable is not statistically significant, the satisfaction level does not seem to vary with respect to rural-urban distinction. However when the time and residency interaction are taken into account, it emerges that there has been a decline in level of satisfaction in rural areas compared to the urban areas in 2012.

Table 49. Estimation Results for Satisfaction: Interaction Model

Explanatory Variables	
C	3.938* (21.82)
YEAR	0.205 (0.628)
T	-0.138 (-0.372)
NUTS2	-0.138 (-0.473)
NUTS3	0.722* (3.424)
NUTS4	0.920* (2.812)
NUTS5	0.667* (3.2)
NUTS6	0.187 (0.735)
NUTS7	0.144 (0.713)
NUTS8	0.612* (2.957)
NUTS9	0.211 (0.925)
NUTS10	0.259 (1.279)

Table 49. Estimation Results for Satisfaction: Interaction Model (Continued)

NUTS11	0.062 (0.324)
NUTS12	-0.121 (-0.595)
NUTS2*YEAR	0.137 (0.285)
NUTS3*YEAR	-0.964* (-2.613)
NUTS4*YEAR	-0.92** (-1.818)
NUTS5*YEAR	-0.81* (-2.113)
NUTS6*YEAR	-0.524 (-1.325)
NUTS7*YEAR	-0.61** (-1.677)
NUTS8*YEAR	-1.06* (-2.966)
NUTS9*YEAR	-0.038 (-0.101)
NUTS10*YEAR	-0.135 (-0.389)
NUTS11*YEAR	0.067 (0.189)
NUTS12*YEAR	-0.022 (-0.061)
NUTS2*T	0.234 (0.515)
NUTS3*T	0.228 (0.563)
NUTS4*T	-0.862 (-1.614)
NUTS5*T	0.333 (0.746)
NUTS6*T	-0.321 (-0.728)
NUTS7*T	0.493 (1.169)
NUTS8*T	-0.47 (-1.116)

Table 49. Estimation Results for Satisfaction: Interaction Model (Continued)

NUTS9*T	0.409 (0.983)
NUTS10*T	0.274 (0.711)
NUTS11*T	0.147 (0.387)
NUTS12*T	0.059 (0.151)
NUTS2*URBAN	0.2 (0.421)
NUTS3*URBAN	0.082 (0.652)
NUTS4*URBAN	-0.635* (-2.074)
NUTS5*URBAN	-0.415* (-3.711)
NUTS6*URBAN	0.027 (0.121)
NUTS7*URBAN	0.651* (3.131)
NUTS8*URBAN	-0.22** (-1.672)
NUTS9*URBAN	0.052 (0.223)
NUTS10*URBAN	0.034 (0.154)
NUTS11*URBAN	0.42* (3.412)
NUTS12*URBAN	0.157 (1.421)
NUTS2*YEAR*T	-0.086 (-0.211)
NUTS3*YEAR*T	0.094 (0.403)
NUTS4*YEAR*T	0.607 (1.245)
NUTS5*YEAR*T	-0.301 (-0.872)
NUTS6*YEAR*T	0.569** (1.95)

Table 49. Estimation Results for Satisfaction: Interaction Model (Continued)

NUTS7*YEAR*T	-0.482** (-1.885)
NUTS8*YEAR*T	0.557* (2.203)
NUTS9*YEAR*T	-0.51* (-2.029)
NUTS10*YEAR*T	-0.135 (-0.929)
NUTS11*YEAR*T	0.032 (0.202)
NUTS12*YEAR*T	0.241 (1.253)
NUTS2*T*URBAN	-0.077 (-0.152)
NUTS3*T* URBAN	-0.139 (-0.709)
NUTS4*T* URBAN	1.215* (2.713)
NUTS5*T* URBAN	0.096 (0.333)
NUTS6*T* URBAN	0.232 (0.79)
NUTS7*T* URBAN	-0.422 (-0.845)
NUTS8*T* URBAN	0.479 (1.228)
NUTS9*T* URBAN	-0.121 (-0.389)
NUTS10*T* URBAN	0.02 (0.075)
NUTS11*T* URBAN	-0.035 (-0.196)
NUTS12*T* URBAN	0.073 (0.452)
NUTS2*URBAN*YEAR	-1.343** (-1.951)
NUTS3*URBAN*YEAR	-0.051 (-0.261)
NUTS4*URBAN*YEAR	0.048 (0.1)
Values in parentheses are t statistics and values in brackets are p – values. *, ** denotes significance at 5 and 10 per cent level.	

Table 49. Estimation Results for Satisfaction: Interaction Model (Continued)

NUTS5*URBAN*YEAR	0.312 (1.487)
NUTS6*URBAN*YEAR	0.074 (0.266)
NUTS7*URBAN*YEAR	-0.329 (-0.754)
NUTS8*URBAN*YEAR	0.446* (2.278)
NUTS9*URBAN*YEAR	-0.214 (-0.651)
NUTS10*URBAN*YEAR	-0.301 (-1.042)
NUTS11*URBAN*YEAR	-0.875* (-3.742)
NUTS12*URBAN*YEAR	-0.393* (-2.247)
NUTS2*YEAR*T*URBAN	1.066 (1.461)
NUTS3*YEAR*T*URBAN	0.094 (0.347)
NUTS4*YEAR*T*URBAN	-0.573 (-0.955)
NUTS5*YEAR*T*URBAN	-0.118 (-0.307)
NUTS6*YEAR*T*URBAN	-0.233 (-0.636)
NUTS7*YEAR*T*URBAN	-0.143 (-0.215)
NUTS8*YEAR*T*URBAN	-0.666 (-1.456)
NUTS9*YEAR*T*URBAN	0.206 (0.475)
NUTS10*YEAR*T*URBAN	0.204 (0.581)
NUTS11*YEAR*T*URBAN	0.085 (0.3)
NUTS12*YEAR*T*URBAN	0.058 (0.246)
F Statistic	7.657
F Statistic (p value)	0.000

Model III takes NUTS 2 regional classification into account (Table 49). The regions that have statistically significant positive coefficients are Aegean, Eastern Marmara, Western Anatolia and Western Blacksea. This finding suggests that these regions have higher satisfaction levels compared to the reference region (İstanbul). When the time dimension is considered it emerges that there has been a reduction in satisfaction level since 2011 in Aegean, Eastern Marmara, Western Anatolia, Central Anatolia and Western Blacksea regions. However there is not any statistically significant difference in time with respect the rural – urban distinction. The interaction term NUTS*Urban is significant for Eastern Marmara, Western Marmara, Central Anatolia, Western Blacksea and Centraleastern Anatolia regions. A negative interaction term for Eastern Marmara, Western Marmara and Western Blacksea indicates that urban satisfaction is comparatively smaller for these regions. Whereas a positive interaction term for Central Anatolia and Centraleastern Anatolia suggests that rural satisfaction is comparatively lower than that of urban satisfaction levels.

Overall it emerges from the analysis that there has been a positive impact of CCT programs on health care services satisfaction level, even though this effect is limited to only several regions. Additionally CCT beneficiaries' level of satisfaction with health care services has increased even though there has been a reduction in the overall level of satisfaction.

7.5. Analysis of Expenditure Patterns

In order to investigate the determinants of expenditures, consumption functions are estimated by employing household budget survey data belonging to the years 2003-2008.The income elasticities of different types of expenditures groups are presented in Table 50. Income elasticity of food consumption ranges between0.55-0.58 over time, similar to the income elasticity of alcohol and smoking expenditures. There have been changes in income elasticity of clothing over the years. It increased from 0.90 in 2003 to 0.97 in 2004, and then decreased to 0.93, but rose close to 1 in 2008. The income elasticity of health expenditures ranges between 0.75-0.88, while income elasticity of education is close to one. Whereas transportation can be classified as a luxury good with an income elasticity greater than 1. The consumption functions for same categories are estimated employing the survey data of 2011.

The estimated elasticities are presented in Table 51. The basic difference between the two sets of estimated elasticities is the income elasticity of food consumption. In the analysis using household budget data income elasticity of food consumption is around 0.58 while the income elasticity from our survey covering the applicants to CCT programs is quite high around 0.90 for both urban and rural areas. The income elasticity for furniture, household appliances and maintenance and education is greater than 1 for all groups, indicating that this is a luxury item for the respondents, supporting the results from the household budget survey.

Table 50. Estimated Income Elasticities from HBSs

	2003	2004	2005	2006	2007	2008
Food	0.568	0.570	0.554	0.568	0.550	0.582
Smoking -Alcohol	0.537	0.555	0.576	0.524	0.522	0.585
Clothing	0.908	0.971	0.935	0.939	0.975	0.990
Rent	0.699	0.685	0.729	0.724	0.726	0.715
Furniture	1.108	1.101	1.09	1.039	1.102	0.975
Health	0.853	0.872	0.881	0.883	0.833	0.750
Transportation	1.098	1.124	1.12	1.208	1.143	1.151
Communication	0.781	0.794	0.810	0.821	0.832	0.789
Culture	0.964	1.013	0.957	0.957	1.062	0.987
Education	1.010	0.945	1.00	0.857	0.977	1.00
Services	0.854	0.896	0.868	0.938	0.964	0.964
Other	1.047	1.066	1.106	1.151	1.087	1.069

Table 51. Estimated Income Elasticities from First Survey

Expenditure Type	Treatment		Control	
	Urban	Rural	Urban	Rural
Food	0.918	0.918	0.918	0.918
Clothing	0.982	0.982	0.982	0.982
Rent	0.607	0.676	0.607	0.676
Heating	0.759	0.910	0.759	0.910
Education	1.174	1.174	1.174	1.174
Health	0.939	1.054	0.831	0.946
Communication	0.688	0.635	0.751	0.698
Cleaning / Hygienic	0.692	0.825	0.651	0.784
Transportation	1.035	1.035	1.035	1.035
Smoking -Alcohol	0.768	0.816	0.708	0.756
Utilities	0.552	0.552	0.552	0.552
Furniture, household appliances and maintenance	1.166	1.166	1.166	1.166

In addition to using household budget survey, data from the two surveys are also employed to estimate expenditure functions. The aim is to investigate if there is any difference among the income elasticities from our sample and those obtained from the household budget survey data.

A double logarithmic expenditure function is estimated for each expenditure type, employing the following model:

$$LnH = \alpha + \beta LnG + \gamma YIL + \delta T + \theta URBAN$$

$$+ \sum_{j=2}^{12} \rho_j NUTS(j) + \lambda_1 LnG(YEAR) + \lambda_2 LnG(T) + \lambda_3 LnG(URBAN)$$

$$+ \sum_{j=2}^{12} \phi_j LnG\big(NUTS(j)\big) + \varepsilon$$

Where all variables are as defined above in addition to
H: expenditures (TL)
G: total income (TL)

The heteroscedasticity problem frequently arises in cross-section regressions. Important examples of regressions with heteroscedastic errors include cross-section regressions of household expenditure on household income, cross-country growth regressions. In the presence of heteroscedasticity the OLS estimators are still unbiased but they are not efficient anymore. The common way to deal with the heteroscedasticity problem is to use OLS estimators, but adjust their variances to the present heteroscedasticity, that is to provide the heteroscedasticity consistent robust estimators. In this report the White Heteroskedasticity robust method has been employed to obtain variance estimates (which does not change the coefficient estimates) for all model estimations. The particular form we are using is robust to heteroskedasticity in both the cross-sectional and time-series dimension.

The first expenditure category is food consumption, which has a statistically significant income elasticity of 0.721 (Table 52). Estimation results indicate that there has been a decrease in income elasticity in 2012 compared to 2011. There is not any statistically significant difference between treatment and control groups with respect to income elasticity of food consumption; but there is a difference with respect to urban – rural distinction. Yet there are statistically significant difference income elasticities for NUTS 2 regions. The coefficients of income for Mediterranean, Western BlackSea, Eastern Blacksea and Southeastern Anatolia regions are positive and statistically significant, indicating that compared to the reference region İstanbul, these regions have a higher income elasticity of food consumption. The estimated income elasticities of food consumption for both treatment and control groups for 2011 and 2012 are presented in Table 53. The highest income elasticity belongs to urban Western Blacksea in 2011, and the smallest one belongs to rural Aegean Region (0.615).

Table 52. Estimation Results for Food Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	0.493	0.493	0.999	0.493
LnG	0.752	0.072	10.385	0.752
YEAR	0.470	0.180	2.605	0.470
T	-0.073	0.187	-0.392	-0.073
URBAN	-0.826	0.208	-3.971	-0.826
NUTS2	-0.169	0.568	-0.298	-0.169
NUTS3	0.666	0.450	1.479	0.666
NUTS4	-0.133	0.512	-0.260	-0.133
NUTS5	0.175	0.455	0.385	0.175
NUTS6	-0.586	0.450	-1.302	-0.586
NUTS7	-0.667	0.551	-1.211	-0.667
NUTS8	-1.509	0.460	-3.278	-1.509
NUTS9	-0.566	0.743	-0.762	-0.566
NUTS10	-0.695	0.616	-1.129	-0.695
NUTS11	-0.060	0.484	-0.124	-0.060
NUTS12	-0.984	0.460	-2.137	-0.984
LnG*YEAR	-0.070	0.027	-2.582	-0.070
LnG*T	0.016	0.028	0.551	0.016
LnG*URBAN	0.115	0.032	3.644	0.115
LnG*NUTS2	0.058	0.084	0.693	0.058
LnG*NUTS3	-0.100	0.066	-1.525	-0.100
LnG*NUTS4	0.006	0.076	0.075	0.006
LnG*NUTS5	-0.031	0.066	-0.474	-0.031
LnG*NUTS6	0.102	0.066	1.549	0.102
LnG*NUTS7	0.098	0.081	1.207	0.098
LnG*NUTS8	0.232	0.067	3.457	0.232
LnG*NUTS9	0.113	0.110	1.034	0.113
LnG*NUTS10	0.087	0.094	0.934	0.087
LnG*NUTS11	0.010	0.071	0.139	0.010
LnG*NUTS12	0.161	0.067	2.397	0.161
LnG*YEAR*T	-0.006	0.002	-2.690	-0.006
	R^2=0.34	F=219.75 (0.000)	White- F=16.51 (0.0000)	JB=195.96 (0.000)

Values in parentheses are p – values.

Table 53. Income Elasticities for Food Expenditure

| | 2011 | | | | 2012 | | | |
| | Treatment | | Control | | Treatment | | Control | |
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.883	-	0.867	-	0.807	-	0.797	-
Western Marmara	0.941	0.826	0.925	0.810	0.865	0.750	0.855	0.740
Aegean	0.783	0.667	0.767	0.652	0.706	0.591	0.697	0.581
Eastern Marmara	0.889	0.773	0.873	0.758	0.812	0.697	0.802	0.687
Western Anatolia	0.852	0.736	0.836	0.721	0.775	0.660	0.765	0.650
Mediterranean	0.985	0.869	0.969	0.854	0.908	0.793	0.898	0.783
Central Anatolia	0.981	0.866	0.965	0.850	0.905	0.789	0.895	0.779
Western Blacksea	1.115	1.000	1.099	0.984	1.039	0.923	1.029	0.913
Eastern Blacksea	0.996	0.881	0.980	0.865	0.920	0.805	0.910	0.795
Northeastern Anatolia	0.970	0.855	0.955	0.839	0.894	0.779	0.884	0.769
Centraleastern Anatolia	0.893	0.778	0.877	0.762	0.816	0.701	0.807	0.691
Southeastern Anatolia	1.044	0.929	1.028	0.913	0.967	0.852	0.958	0.842

Table 54. Estimation Results for Clothing Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	-2.014	0.748	-2.694	0.007
LnG	0.820	0.110	7.464	0.000
YEAR	0.342	0.319	1.072	0.284
T	-0.400	0.322	-1.242	0.214
URBAN	-0.655	0.351	-1.866	0.062
NUTS2	0.878	0.896	0.981	0.327
NUTS3	1.255	0.757	1.658	0.097
NUTS4	0.534	1.026	0.521	0.603
NUTS5	1.158	0.802	1.443	0.149
NUTS6	-0.188	0.858	-0.219	0.827
NUTS7	3.070	1.118	2.747	0.006
NUTS8	-1.518	0.796	-1.907	0.057
NUTS9	1.334	0.957	1.394	0.163
NUTS10	-0.611	1.252	-0.488	0.626
NUTS11	-1.741	0.825	-2.110	0.035
NUTS12	1.012	0.737	1.374	0.170
LNG*YEAR	-0.063	0.048	-1.317	0.188

Table 54. Estimation Results for Clothing Expenditures (Continued)

LnG*T	0.065	0.049	1.329	0.184
LnG*URBAN	0.075	0.053	1.421	0.155
LnG*NUTS2	-0.177	0.134	-1.323	0.186
LnG*NUTS3	-0.184	0.111	-1.655	0.098
LnG*NUTS4	-0.047	0.153	-0.308	0.758
LnG*NUTS5	-0.120	0.118	-1.021	0.307
LnG*NUTS6	0.077	0.127	0.609	0.542
LnG*NUTS7	-0.438	0.169	-2.601	0.009
LnG*NUTS8	0.270	0.117	2.308	0.021
LnG*NUTS9	-0.147	0.140	-1.049	0.294
LnG*NUTS10	0.170	0.189	0.897	0.370
LnG*NUTS11	0.357	0.121	2.941	0.003
LnG*NUTS12	-0.021	0.108	-0.198	0.843
LnG*YEAR*T	-0.004	0.004	-0.999	0.318
	R^2=0.26	F=114.88 (0.000)	White- F=14.92 (0.0000)	JB=87.27 (0.000)

Values in parentheses are p – values.

Table 55.Income Elasticities for Clothing Expenditure

	2011				2012			
	Treatment		Control		Treatment		Control	
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.960	-	0.895	-	0.892	-	0.832	-
Western Marmara	0.783	0.707	0.718	0.643	0.715	0.640	0.655	0.580
Aegean	0.775	0.700	0.711	0.636	0.708	0.633	0.648	0.572
Eastern Marmara	0.913	0.838	0.848	0.773	0.845	0.770	0.785	0.710
Western Anatolia	0.840	0.764	0.775	0.700	0.772	0.697	0.712	0.637
Mediterranean	1.037	0.962	0.973	0.897	0.970	0.895	0.910	0.834
Central Anatolia	0.522	0.446	0.457	0.382	0.454	0.379	0.394	0.319
Western Blacksea	1.230	1.155	1.166	1.090	1.163	1.087	1.102	1.027
Eastern Blacksea	0.813	0.738	0.748	0.673	0.745	0.670	0.685	0.610
Northeastern Anatolia	1.129	1.054	1.065	0.990	1.062	0.987	1.002	0.926
Centraleastern Anatolia	1.317	1.242	1.252	1.177	1.250	1.174	1.189	1.114
Southeastern Anatolia	0.938	0.863	0.874	0.799	0.871	0.796	0.811	0.735

Table 56. Estimation Results for Rent Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	1.025	0.554	1.850	0.064
LnG	0.680	0.080	8.523	0.000
YEAR	0.239	0.218	1.100	0.272
T	0.046	0.215	0.214	0.830
URBAN	1.223	0.290	4.222	0.000
NUTS2	-2.560	0.747	-3.429	0.001
NUTS3	0.326	0.508	0.641	0.521
NUTS4	-1.117	0.662	-1.688	0.091
NUTS5	-0.926	0.499	-1.855	0.064
NUTS6	-0.756	0.584	-1.295	0.195
NUTS7	0.569	0.944	0.602	0.547
NUTS8	0.057	0.564	0.100	0.920
NUTS9	1.385	0.604	2.291	0.022
NUTS10	-0.835	0.751	-1.111	0.267
NUTS11	0.288	0.600	0.480	0.632
NUTS12	0.171	0.550	0.311	0.756
LNG*YEAR	-0.024	0.032	-0.756	0.450
LnG*T	-0.012	0.032	-0.367	0.714
LnG*URBAN	-0.162	0.043	-3.776	0.000
LnG*NUTS2	0.327	0.109	2.995	0.003
LnG*NUTS3	-0.085	0.073	-1.171	0.242
LnG*NUTS4	0.123	0.096	1.280	0.201
LnG*NUTS5	0.082	0.071	1.145	0.252
LnG*NUTS6	0.051	0.084	0.599	0.549
LnG*NUTS7	-0.172	0.139	-1.240	0.215
LnG*NUTS8	-0.082	0.081	-1.009	0.313
LnG*NUTS9	-0.253	0.087	-2.917	0.004
LnG*NUTS10	0.072	0.113	0.635	0.525
LnG*NUTS11	-0.100	0.087	-1.156	0.248
LnG*NUTS12	-0.092	0.079	-1.164	0.244
LnG*YEAR*T	0.003	0.003	1.141	0.254
	R^2=0.33	F=98.85 (0.000)	White- F=4.21 (0.0000)	JB=1251.51 (0.000)

Values in parentheses are p – values.

Table 57. Income Elasticities for Rent Expenditure

NUTS	2011				2012			
	Treatment		Control		Treatment		Control	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.506	0.668	0.518	0.680	0.485	0.647	0.493	0.656
Western Marmara	0.832	0.995	0.844	1.007	0.811	0.974	0.820	0.982
Aegean	0.421	0.583	0.432	0.595	0.400	0.562	0.408	0.571
Eastern Marmara	0.629	0.791	0.640	0.803	0.607	0.770	0.616	0.779
Western Anatolia	0.588	0.750	0.599	0.762	0.566	0.729	0.575	0.738
Mediterranean	0.556	0.719	0.568	0.731	0.535	0.698	0.544	0.706
Central Anatolia	0.333	0.496	0.345	0.508	0.312	0.475	0.321	0.483
Western Blacksea	0.424	0.586	0.436	0.598	0.403	0.565	0.411	0.574
Eastern Blacksea	0.253	0.415	0.265	0.427	0.232	0.394	0.241	0.403
Northeastern Anatolia	0.578	0.740	0.589	0.752	0.556	0.719	0.565	0.728
Centraleastern Anatolia	0.405	0.568	0.417	0.580	0.384	0.547	0.393	0.555
Southeastern Anatolia	0.413	0.576	0.425	0.588	0.392	0.555	0.401	0.563

Table 58. Estimation Results for Heating Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	1.949	0.839	2.323	0.020
LnG	0.331	0.120	2.752	0.006
YEAR	2.624	0.279	9.395	0.000
T	0.075	0.258	0.289	0.772
URBAN	0.292	0.284	1.027	0.304
NUTS2	-0.649	1.179	-0.550	0.582
NUTS3	-2.290	0.828	-2.765	0.006
NUTS4	-2.733	0.960	-2.847	0.004
NUTS5	-1.700	0.869	-1.957	0.050
NUTS6	-1.913	0.844	-2.268	0.023
NUTS7	-3.387	1.004	-3.373	0.001
NUTS8	-1.252	0.921	-1.359	0.174
NUTS9	-1.158	0.939	-1.232	0.218
NUTS10	-2.637	0.924	-2.853	0.004
NUTS11	-0.872	0.886	-0.984	0.325
NUTS12	-0.652	0.871	-0.748	0.454
LNG*YEAR	-0.335	0.042	-8.006	0.000
LnG*T	-0.022	0.039	-0.579	0.563
LnG*URBAN	-0.052	0.043	-1.225	0.221
LnG*NUTS2	0.072	0.173	0.414	0.679

Table 58. Estimation Results for Heating Expenditures (Continued)

LnG*NUTS3	0.296	0.119	2.495	0.013
LnG*NUTS4	0.370	0.140	2.652	0.008
LnG*NUTS5	0.220	0.125	1.765	0.078
LnG*NUTS6	0.212	0.121	1.752	0.080
LnG*NUTS7	0.479	0.145	3.300	0.001
LnG*NUTS8	0.137	0.133	1.036	0.300
LnG*NUTS9	0.116	0.135	0.860	0.390
LnG*NUTS10	0.330	0.136	2.433	0.015
LnG*NUTS11	0.105	0.127	0.824	0.410
LnG*NUTS12	0.059	0.125	0.477	0.634
LnG*YEAR*T	0.016	0.004	4.222	0.000
	R^2=0.22	F=72.79 (0.000)	White- F=10.09 (0.0000)	JB=1696.40 (0.000)

Values in parentheses are p – values.

Table 59. Income Elasticities for Heating Expenditure

	2011				2012			
	Treatment		Control		Treatment		Control	
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.256	-	0.279	-	-0.062	-	-0.056	-
Western Marmara	0.328	0.380	0.350	0.403	0.010	0.062	0.016	0.068
Aegean	0.552	0.604	0.575	0.627	0.234	0.286	0.240	0.292
Eastern Marmara	0.626	0.678	0.649	0.701	0.308	0.360	0.314	0.366
Western Anatolia	0.476	0.528	0.499	0.551	0.158	0.210	0.164	0.216
Mediterranean	0.468	0.520	0.491	0.543	0.150	0.202	0.156	0.208
Central Anatolia	0.736	0.788	0.758	0.810	0.417	0.470	0.424	0.476
Western Blacksea	0.394	0.446	0.416	0.468	0.075	0.127	0.081	0.134
Eastern Blacksea	0.372	0.424	0.395	0.447	0.054	0.106	0.060	0.112
Northeastern Anatolia	0.586	0.638	0.609	0.661	0.268	0.320	0.274	0.326
Centraleastern Anatolia	0.361	0.413	0.384	0.436	0.043	0.095	0.049	0.101
Southeastern Anatolia	0.316	0.368	0.338	0.390	-0.003	0.050	0.004	0.056

Table 60. Estimation Results for Education Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	2.360	0.803	2.937	0.003
LnG	0.250	0.117	2.133	0.033
YEAR	1.069	0.333	3.213	0.001
T	-0.128	0.334	-0.383	0.702
URBAN	-0.521	0.379	-1.375	0.169
NUTS2	-1.262	1.231	-1.025	0.306
NUTS3	-2.625	0.811	-3.235	0.001
NUTS4	-1.386	1.023	-1.354	0.176
NUTS5	-1.101	0.807	-1.363	0.173
NUTS6	-0.675	0.834	-0.810	0.418
NUTS7	-1.932	1.297	-1.490	0.136
NUTS8	-0.737	0.849	-0.867	0.386
NUTS9	-2.256	0.891	-2.533	0.011
NUTS10	-2.832	1.145	-2.473	0.013
NUTS11	-2.852	0.982	-2.903	0.004
NUTS12	-1.047	0.857	-1.221	0.222
LNG*YEAR	-0.169	0.050	-3.394	0.001
LnG*T	0.018	0.050	0.361	0.718
LnG*URBAN	0.070	0.057	1.233	0.218
LnG*NUTS2	0.171	0.184	0.932	0.352
LnG*NUTS3	0.390	0.119	3.281	0.001
LnG*NUTS4	0.218	0.151	1.441	0.150
LnG*NUTS5	0.161	0.118	1.370	0.171
LnG*NUTS6	0.090	0.122	0.734	0.463
LnG*NUTS7	0.258	0.196	1.317	0.188
LnG*NUTS8	0.097	0.124	0.779	0.436
LnG*NUTS9	0.317	0.130	2.447	0.014
LnG*NUTS10	0.429	0.173	2.482	0.013
LnG*NUTS11	0.417	0.144	2.896	0.004
LnG*NUTS12	0.159	0.125	1.272	0.203
LnG*YEAR*T	0.002	0.005	0.342	0.732
	R^2=0.04	F=13.11 (0.000)	White- F=4.62 (0.0000)	JB=402.64 (0.000)

Values in parentheses are p – values.

Table 61. Income Elasticities for Education Expenditure

	2011				2012			
	Treatment		Control		Treatment		Control	
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.339	-	0.321	-	0.171	-	0.152	-
Western Marmara	0.510	0.440	0.492	0.421	0.342	0.272	0.323	0.252
Aegean	0.728	0.658	0.710	0.640	0.561	0.491	0.541	0.471
Eastern Marmara	0.557	0.487	0.539	0.469	0.390	0.319	0.370	0.300
Western Anatolia	0.500	0.430	0.482	0.412	0.332	0.262	0.313	0.242
Mediterranean	0.429	0.358	0.411	0.340	0.261	0.191	0.241	0.171
Central Anatolia	0.597	0.526	0.579	0.508	0.429	0.359	0.409	0.339
Western Blacksea	0.436	0.366	0.418	0.347	0.268	0.198	0.248	0.178
Eastern Blacksea	0.656	0.586	0.638	0.568	0.489	0.418	0.469	0.399
Northeastern Anatolia	0.768	0.698	0.750	0.679	0.600	0.530	0.581	0.510
Centraleastern Anatolia	0.756	0.686	0.738	0.667	0.588	0.518	0.568	0.498
Southeastern Anatolia	0.498	0.428	0.480	0.410	0.331	0.260	0.311	0.241

Table 62. Estimation Results for Health Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	-3.534	1.410	-2.507	0.012
LnG	1.094	0.205	5.337	0.000
YEAR	1.378	0.443	3.112	0.002
T	-0.745	0.440	-1.694	0.090
URBAN	0.759	0.477	1.593	0.111
NUTS2	-1.749	2.072	-0.844	0.399
NUTS3	-1.787	1.445	-1.237	0.216
NUTS4	0.213	1.520	0.140	0.889
NUTS5	-0.362	1.398	-0.259	0.796
NUTS6	0.228	1.401	0.163	0.871
NUTS7	4.518	1.780	2.538	0.011
NUTS8	-0.212	1.435	-0.148	0.883
NUTS9	-1.166	1.562	-0.746	0.455
NUTS10	3.703	1.653	2.241	0.025
NUTS11	-1.129	1.435	-0.787	0.431
NUTS12	1.422	1.397	1.017	0.309

Table 62. Estimation Results for Health Expenditures (Continued)

LNG*YEAR	-0.238	0.067	-3.567	0.000
LnG*T	0.105	0.066	1.589	0.112
LnG*URBAN	-0.144	0.072	-1.995	0.046
LnG*NUTS2	0.195	0.310	0.628	0.530
LnG*NUTS3	0.282	0.210	1.342	0.180
LnG*NUTS4	0.021	0.222	0.095	0.924
LnG*NUTS5	0.087	0.203	0.429	0.668
LnG*NUTS6	-0.035	0.204	-0.170	0.865
LnG*NUTS7	-0.677	0.266	-2.541	0.011
LnG*NUTS8	0.091	0.209	0.434	0.664
LnG*NUTS9	0.177	0.226	0.780	0.435
LnG*NUTS10	-0.569	0.246	-2.308	0.021
LnG*NUTS11	0.232	0.208	1.111	0.267
LnG*NUTS12	-0.176	0.203	-0.869	0.385
LnG*YEAR*T	-0.001	0.006	-0.219	0.827
	R^2=0.16	F=54.31 (0.000)	White- F=8.93 (0.0000)	JB=27.43 (0.000)

Values in parentheses are p – values.

Table 63.Income Elasticities for Health Expenditure

	2011				2012			
	Treatment		Control		Treatment		Control	
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	1.056	-	0.950	-	0.817	-	0.712	-
Western Marmara	1.250	1.394	1.145	1.288	1.011	1.155	0.907	1.051
Aegean	1.338	1.481	1.232	1.376	1.099	1.242	0.994	1.138
Eastern Marmara	1.077	1.220	0.971	1.115	0.838	0.981	0.734	0.877
Western Anatolia	1.142	1.286	1.037	1.181	0.903	1.047	0.799	0.943
Mediterranean	1.021	1.164	0.915	1.059	0.782	0.925	0.678	0.821
Central Anatolia	0.379	0.522	0.273	0.417	0.140	0.283	0.036	0.179
Western Blacksea	1.146	1.290	1.041	1.184	0.907	1.051	0.803	0.946
Eastern Blacksea	1.232	1.376	1.127	1.270	0.993	1.137	0.889	1.033
Northeastern Anatolia	0.487	0.631	0.382	0.525	0.248	0.392	0.144	0.287
Centraleastern Anatolia	1.287	1.431	1.182	1.325	1.048	1.192	0.944	1.087
Southeastern Anatolia	0.879	1.023	0.774	0.917	0.640	0.784	0.536	0.680

Table 64. Estimation Results for Communication Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	-3.690	0.748	-4.932	0.000
LnG	1.027	0.109	9.459	0.000
YEAR	-0.412	0.285	-1.448	0.148
T	0.392	0.287	1.366	0.172
URBAN	0.953	0.319	2.987	0.003
NUTS2	0.890	1.162	0.766	0.444
NUTS3	2.138	0.833	2.567	0.010
NUTS4	5.364	0.880	6.097	0.000
NUTS5	2.959	0.755	3.919	0.000
NUTS6	-0.205	0.775	-0.265	0.791
NUTS7	1.010	0.961	1.052	0.293
NUTS8	3.527	0.792	4.452	0.000
NUTS9	3.107	0.872	3.563	0.000
NUTS10	3.635	0.972	3.740	0.000
NUTS11	1.221	0.799	1.529	0.126
NUTS12	1.769	0.772	2.291	0.022
LNG*YEAR	0.073	0.043	1.706	0.088
LnG*T	-0.052	0.043	-1.194	0.233
LnG*URBAN	-0.155	0.048	-3.216	0.001
LnG*NUTS2	-0.152	0.172	-0.884	0.377
LnG*NUTS3	-0.342	0.122	-2.807	0.005
LnG*NUTS4	-0.749	0.129	-5.795	0.000
LnG*NUTS5	-0.400	0.109	-3.661	0.000
LnG*NUTS6	0.033	0.113	0.295	0.768
LnG*NUTS7	-0.080	0.142	-0.563	0.573
LnG*NUTS8	-0.514	0.115	-4.457	0.000
LnG*NUTS9	-0.439	0.127	-3.464	0.001
LnG*NUTS10	-0.496	0.146	-3.395	0.001
LnG*NUTS11	-0.126	0.116	-1.079	0.281
LnG*NUTS12	-0.263	0.112	-2.345	0.019
LnG*YEAR*T	-0.018	0.004	-4.571	0.000
	R^2=0.14	F=32.03 (0.000)	White- F=10.41 (0.0000)	JB=286.53 (0.000)

Values in parentheses are p – values.

Table 65. Income Elasticities for Communication Expenditure

	2011				2012			
	Treatment		Control		Treatment		Control	
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.821	-	0.872	-	0.876	-	0.945	-
Western Marmara	0.668	0.823	0.720	0.875	0.723	0.878	0.793	0.948
Aegean	0.479	0.634	0.530	0.685	0.534	0.689	0.603	0.758
Eastern Marmara	0.071	0.226	0.123	0.278	0.126	0.281	0.196	0.350
Western Anatolia	0.420	0.575	0.472	0.627	0.475	0.630	0.545	0.700
Mediterranean	0.854	1.009	0.905	1.060	0.909	1.064	0.978	1.133
Central Anatolia	0.741	0.896	0.792	0.947	0.796	0.951	0.865	1.020
Western Blacksea	0.307	0.462	0.358	0.513	0.362	0.517	0.431	0.586
Eastern Blacksea	0.382	0.537	0.434	0.588	0.437	0.592	0.506	0.661
Northeastern Anatolia	0.324	0.479	0.376	0.530	0.379	0.534	0.449	0.603
Centraleastern Anatolia	0.695	0.850	0.746	0.901	0.750	0.905	0.819	0.974
Southeastern Anatolia	0.557	0.712	0.609	0.764	0.612	0.767	0.682	0.837

Table 66. Estimation Results for Cleaning Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	-0.521	0.682	-0.764	0.445
LnG	0.612	0.100	6.109	0.000
YEAR	-0.545	0.287	-1.900	0.058
T	0.153	0.294	0.521	0.603
URBAN	0.427	0.327	1.305	0.192
NUTS2	1.011	0.844	1.198	0.231
NUTS3	1.781	0.669	2.663	0.008
NUTS4	1.415	0.722	1.959	0.050
NUTS5	0.786	0.670	1.173	0.241
NUTS6	-0.960	0.710	-1.352	0.176
NUTS7	-2.775	0.926	-2.996	0.003
NUTS8	1.311	0.699	1.876	0.061
NUTS9	-1.035	0.934	-1.108	0.268
NUTS10	-3.722	1.161	-3.207	0.001
NUTS11	-2.064	0.767	-2.691	0.007
NUTS12	-1.658	0.697	-2.380	0.017

Table 66. Estimation Results for Cleaning Expenditures (Continued)

LNG*YEAR	0.044	0.043	1.012	0.312
LnG*T	-0.027	0.044	-0.618	0.537
LnG*URBAN	-0.069	0.049	-1.400	0.162
LnG*NUTS2	-0.149	0.125	-1.189	0.235
LnG*NUTS3	-0.238	0.098	-2.430	0.015
LnG*NUTS4	-0.193	0.106	-1.815	0.070
LnG*NUTS5	-0.112	0.098	-1.144	0.253
LnG*NUTS6	0.116	0.104	1.112	0.266
LnG*NUTS7	0.471	0.137	3.434	0.001
LnG*NUTS8	-0.160	0.103	-1.563	0.118
LnG*NUTS9	0.184	0.137	1.338	0.181
LnG*NUTS10	0.547	0.176	3.110	0.002
LnG*NUTS11	0.343	0.113	3.045	0.002
LnG*NUTS12	0.252	0.102	2.466	0.014
LnG*YEAR*T	0.000	0.004	-0.052	0.958
	R^2=0.15	F=69.35 (0.000)	White- F=12.32 (0.0000)	JB=163.48 (0.000)

Values in parentheses are p – values.

Table 67. Income Elasticities for Cleaning Expenditure

	2011				2012			
	Treatment		Control		Treatment		Control	
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.515	-	0.542	-	0.558	-	0.586	-
Western Marmara	0.366	0.435	0.393	0.463	0.409	0.479	0.437	0.506
Aegean	0.277	0.346	0.304	0.373	0.320	0.389	0.348	0.417
Eastern Marmara	0.322	0.391	0.349	0.419	0.365	0.435	0.393	0.462
Western Anatolia	0.403	0.472	0.430	0.500	0.446	0.516	0.474	0.543
Mediterranean	0.631	0.700	0.658	0.728	0.674	0.744	0.702	0.771
Central Anatolia	0.986	1.055	1.013	1.083	1.029	1.099	1.057	1.126
Western Blacksea	0.355	0.424	0.382	0.451	0.398	0.468	0.426	0.495
Eastern Blacksea	0.699	0.768	0.726	0.796	0.742	0.812	0.770	0.839
Northeastern Anatolia	1.062	1.132	1.090	1.159	1.106	1.175	1.134	1.203
Centraleastern Anatolia	0.858	0.927	0.885	0.954	0.901	0.970	0.929	0.998
Southeastern Anatolia	0.767	0.836	0.794	0.864	0.810	0.880	0.838	0.907

Table 68. Estimation Results for Transportation Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	-0.813	0.879	-0.925	0.355
LnG	0.774	0.127	6.090	0.000
YEAR	-0.802	0.348	-2.302	0.021
T	-0.718	0.338	-2.124	0.034
URBAN	0.677	0.391	1.733	0.083
NUTS2	-3.608	1.512	-2.387	0.017
NUTS3	0.136	0.950	0.143	0.886
NUTS4	1.049	1.073	0.978	0.328
NUTS5	-0.746	0.884	-0.845	0.398
NUTS6	-0.696	0.873	-0.798	0.425
NUTS7	-3.577	1.382	-2.589	0.010
NUTS8	0.006	0.939	0.007	0.995
NUTS9	-0.692	1.012	-0.683	0.494
NUTS10	2.156	1.088	1.982	0.048
NUTS11	-0.238	0.916	-0.259	0.796
NUTS12	-1.256	0.915	-1.372	0.170
LNG*YEAR	0.082	0.052	1.580	0.114
LnG*T	0.097	0.051	1.905	0.057
LnG*URBAN	-0.111	0.059	-1.888	0.059
LnG*NUTS2	0.487	0.221	2.206	0.027
LnG*NUTS3	-0.083	0.138	-0.601	0.548
LnG*NUTS4	-0.214	0.157	-1.363	0.173
LnG*NUTS5	0.072	0.127	0.566	0.572
LnG*NUTS6	0.089	0.126	0.703	0.482
LnG*NUTS7	0.537	0.204	2.627	0.009
LnG*NUTS8	-0.045	0.136	-0.330	0.742
LnG*NUTS9	0.056	0.147	0.380	0.704
LnG*NUTS10	-0.383	0.163	-2.351	0.019
LnG*NUTS11	0.005	0.133	0.034	0.973
LnG*NUTS12	0.077	0.133	0.577	0.564
LnG*YEAR*T	0.006	0.005	1.363	0.173
	R^2=0.21	F=72.64 (0.000)	White- F=6.49 (0.0000)	JB=181.56 (0.000)

Values in parentheses are p – values.

Table 69. Income Elasticities for Transportation Expenditure

| | 2011 | | | | 2012 | | | |
| | Treatment | | Control | | Treatment | | Control | |
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.760	-	0.663	-	0.849	-	0.746	-
Western Marmara	1.247	1.358	1.150	1.261	1.336	1.447	1.233	1.344
Aegean	0.677	0.788	0.580	0.691	0.766	0.877	0.663	0.774
Eastern Marmara	0.545	0.656	0.449	0.560	0.634	0.745	0.531	0.642
Western Anatolia	0.832	0.943	0.735	0.846	0.921	1.032	0.818	0.929
Mediterranean	0.848	0.959	0.752	0.863	0.937	1.048	0.834	0.945
Central Anatolia	1.296	1.407	1.200	1.311	1.385	1.496	1.282	1.393
Western Blacksea	0.715	0.826	0.618	0.729	0.804	0.915	0.701	0.812
Eastern Blacksea	0.815	0.926	0.719	0.830	0.904	1.015	0.801	0.912
Northeastern Anatolia	0.377	0.488	0.280	0.392	0.466	0.577	0.363	0.474
Centraleastern Anatolia	0.764	0.875	0.668	0.779	0.853	0.964	0.750	0.861
Southeastern Anatolia	0.837	0.948	0.740	0.851	0.925	1.036	0.822	0.933

Table 70. Estimation Results for Cigarette Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	2.844	1.142	2.490	0.013
LnG	0.268	0.166	1.614	0.107
YEAR	-0.312	0.405	-0.770	0.441
T	0.132	0.398	0.333	0.739
URBAN	0.056	0.433	0.129	0.897
NUTS2	1.837	1.500	1.224	0.221
NUTS3	-1.846	1.149	-1.607	0.108
NUTS4	-0.809	1.307	-0.619	0.536
NUTS5	-1.695	1.117	-1.518	0.129
NUTS6	-0.220	1.138	-0.193	0.847
NUTS7	-3.582	1.311	-2.732	0.006
NUTS8	0.299	1.138	0.263	0.793
NUTS9	-3.255	1.528	-2.130	0.033
NUTS10	0.796	1.352	0.589	0.556
NUTS11	-1.690	1.145	-1.476	0.140
NUTS12	-2.540	1.113	-2.283	0.023
LNG*YEAR	0.038	0.061	0.620	0.535
LnG*T	-0.018	0.060	-0.298	0.766
LnG*URBAN	-0.018	0.065	-0.274	0.784

Table 70. Estimation Results for Cigarette Expenditures (Continued)

LnG*NUTS2	-0.254	0.222	-1.146	0.252
LnG*NUTS3	0.253	0.167	1.519	0.129
LnG*NUTS4	0.129	0.191	0.672	0.501
LnG*NUTS5	0.258	0.161	1.603	0.109
LnG*NUTS6	0.004	0.165	0.023	0.982
LnG*NUTS7	0.558	0.191	2.918	0.004
LnG*NUTS8	-0.035	0.165	-0.210	0.834
LnG*NUTS9	0.465	0.222	2.099	0.036
LnG*NUTS10	-0.133	0.201	-0.663	0.507
LnG*NUTS11	0.194	0.166	1.168	0.243
LnG*NUTS12	0.341	0.161	2.117	0.034
LnG*YEAR*T	0.000	0.005	0.085	0.933
	R^2=0.11	F=25.91 (0.000)	White- F=3.14 (0.0000)	JB=1069.20 (0.000)

Values in parentheses are p – values.

Table 71. Income Elasticities for Cigarettes Expenditure

	2011				2012			
	Treatment		Control		Treatment		Control	
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.232	-	0.250	-	0.270	-	0.287	-
Western Marmara	-0.022	-0.005	-0.005	0.013	0.016	0.033	0.033	0.051
Aegean	0.485	0.503	0.503	0.521	0.523	0.541	0.540	0.558
Eastern Marmara	0.361	0.378	0.379	0.396	0.399	0.416	0.416	0.434
Western Anatolia	0.490	0.508	0.508	0.526	0.528	0.546	0.546	0.563
Mediterranean	0.236	0.254	0.254	0.271	0.274	0.292	0.291	0.309
Central Anatolia	0.790	0.808	0.808	0.826	0.828	0.846	0.846	0.864
Western Blacksea	0.197	0.215	0.215	0.233	0.235	0.253	0.253	0.271
Eastern Blacksea	0.697	0.715	0.715	0.733	0.735	0.753	0.753	0.770
Northeastern Anatolia	0.098	0.116	0.116	0.134	0.136	0.154	0.154	0.172
Centraleastern Anatolia	0.426	0.443	0.443	0.461	0.463	0.481	0.481	0.499
Southeastern Anatolia	0.573	0.590	0.590	0.608	0.611	0.628	0.628	0.646

Table 72. Estimation Results for Utilities Expenditures

Variables	Coefficient	SE	t statistics	p value
Constant	4.007	0.558	7.182	0.000
LnG	0.099	0.081	1.219	0.223
YEAR	0.386	0.187	2.062	0.039
T	0.365	0.189	1.933	0.053
URBAN	-0.103	0.211	-0.487	0.626
NUTS2	-1.486	0.778	-1.910	0.056
NUTS3	-2.779	0.551	-5.047	0.000
NUTS4	-1.758	0.647	-2.717	0.007
NUTS5	-1.840	0.565	-3.258	0.001
NUTS6	-2.265	0.553	-4.099	0.000
NUTS7	-0.990	0.890	-1.112	0.266
NUTS8	-1.545	0.564	-2.739	0.006
NUTS9	-2.834	0.633	-4.481	0.000
NUTS10	-2.070	0.650	-3.185	0.002
NUTS11	-3.651	0.597	-6.114	0.000
NUTS12	-2.904	0.564	-5.149	0.000
LNG*YEAR	-0.057	0.028	-2.015	0.044
LnG*T	-0.061	0.028	-2.159	0.031
LnG*URBAN	0.017	0.032	0.534	0.593
LnG*NUTS2	0.229	0.115	1.987	0.047
LnG*NUTS3	0.372	0.080	4.655	0.000
LnG*NUTS4	0.255	0.095	2.683	0.007
LnG*NUTS5	0.230	0.082	2.801	0.005
LnG*NUTS6	0.323	0.080	4.021	0.000
LnG*NUTS7	0.107	0.134	0.797	0.426
LnG*NUTS8	0.212	0.082	2.583	0.010
LnG*NUTS9	0.387	0.092	4.210	0.000
LnG*NUTS10	0.257	0.097	2.660	0.008
LnG*NUTS11	0.483	0.087	5.550	0.000
LnG*NUTS12	0.375	0.082	4.577	0.000
LnG*YEAR*T	0.008	0.003	2.982	0.003
	R^2=0.13	F=63.57 (0.000)	White- F=16.98 (0.0000)	JB=196.73 (0.000)

Values in parentheses are p – values.

Table 73. Income Elasticities for Utilities Expenditure

| | 2011 | | | | 2012 | | | |
| | Treatment | | Control | | Treatment | | Control | |
NUTS	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
İstanbul	0.055	-	0.116	-	0.005	-	0.059	-
Western Marmara	0.284	0.267	0.345	0.328	0.235	0.218	0.289	0.272
Aegean	0.427	0.410	0.488	0.471	0.377	0.360	0.431	0.414
Eastern Marmara	0.309	0.292	0.371	0.354	0.260	0.243	0.314	0.297
Western Anatolia	0.284	0.267	0.346	0.329	0.235	0.218	0.289	0.272
Mediterranean	0.377	0.360	0.439	0.422	0.328	0.311	0.382	0.365
Central Anatolia	0.161	0.144	0.223	0.206	0.112	0.095	0.166	0.149
Western Blacksea	0.266	0.249	0.328	0.311	0.217	0.200	0.271	0.254
Eastern Blacksea	0.442	0.425	0.503	0.486	0.393	0.376	0.447	0.430
Northeastern Anatolia	0.311	0.294	0.373	0.356	0.262	0.245	0.316	0.299
Centraleastern Anatolia	0.538	0.521	0.599	0.582	0.489	0.472	0.543	0.526
Southeastern Anatolia	0.429	0.412	0.491	0.474	0.380	0.363	0.434	0.417

The estimation results of demand for clothing expenditures are presented in Table54. The income elasticity is 0.820 which is statistically significant, which has decreased in 2012 compared to 2011. There is no statistically significant difference regarding treatment and control groups. However, income elasticity of clothing expenditures in urban areas is higher than those of rural areas. With respect to reference region İstanbul, the income elasticities for Aegean, Western Anatolia, Central Anatolia and Eastern Blacksea regions are lower. Whereas income elasticities of clothing expenditures are higher for Western Blacksea and Centraleastern Anatolia regions compared to the reference region. The highest income elasticity of clothing expenditures belongs to urban Centraleastern Anatolia in 2011 (1.294); the lowest one belongs rural Central Anatolia in 2012 (0.270).

The income elasticity of rental expenditures is statistically significant, which does not show any statistically significant difference in time and between treatment and control groups (Table 56). But regarding rural-urban distinction, the income elasticity of rental expenditures is higher in rural areas. The elasticities for all NUTS 2 regions except Mediterranean and Central Anatolia are statistically significant. Compared to the reference region income elasticities are lower in Aegean, Western Blacksea, Eastern Blacksea, Centraleastern Anatolia and Southeastern Anatolia regions; whereas it is higher for Western Marmara, Eastern Marmara, Western Anatolia and Northeastern Anatolia regions. The highest income elasticity belongs to rural Western Marmara (0.978), the lowest one belongs to Eastern Blacksea region(0.200).

The estimations for heating expenditures reveal an income elasticity of 0.353, which does not show any statistically significant difference between the treatment and the control groups and rural-urban distinction; but it has decreased in 2012 compared to 2011 (Table 58). Income elasticities of Western Marmara, Centraleastern Anatolia and Southeastern Anatolia regions are not statistically

significant; but those of other regions are significant and positive. The highest elasticity belongs to Central Anatolia, and the lowest elasticity belongs to South east Anatolia regions.

The estimation results for education expenditures are provided in Table 60. The income elasticity of 0.220 is statistically significant, which exhibits a decrease in 2012. But there is no statistically significant difference with respect to treatment and control groups. However, education expenditures differ in rural and urban areas, the income elasticity for education is higher in urban areas. The income - NUTS regional interaction dummy variables are significant and positive for all regions except Western Marmara and Mediterranean regions. The highest elasticity belongs to rural Centraleastern Anatolia in 2011 (0.745), and the lowest one belongs to İstanbul in 2011 (0.173).

The health expenditures have an income elasticity of 1.184, indicating that health is a luxury good (Table 62). It has decreased in 2012. The income elasticity for treatment group is higher than that of control group but lower for rural areas compared to the urban areas. Moreover income - NUTS regions interaction dummy variables are positive for Aegean and Centraleastern Anatolia regions; but negative for Central Anatolia, Northeastern Anatolia and Southeastern Anatolia regions. The income elasticity of education expenditures exhibits a great variation with respect to NUTS regions and rural – urban distinction.

Similarly, communication can also be regarded as a luxury good, with an income elasticity of 1.044; with an increase in 2012 (Table 64). Additionally, income elasticity is lower for treatment group and for urban areas. The income NUTS regions interaction dummy variables are also significant except for Western Marmara, Mediterranean and Central Anatolia regions. The highest income elasticity belongs to rural Mediterranean and the highest belongs to Eastern Marmara regions. The income elasticity for cleaning expenditures is 0.594 and it increased in 2012 but does not show any significant difference with respect to treatment and control groups (Table 66). However, it is lower in urban areas compared to the rural areas. Additionally, all NUTS regional interaction terms are statistically significant, the highest belonging to rural Northeastern Anatolia in 2012.

Even though the income elasticity of transportation expenditures is statistically significant, it does not show any difference between 2011 and 2012 (Table 68). But the treatment group has a higher income elasticity compared to the control group, so do the urban areas. When regional differences are investigated, it emerges that the elasticities are higher for Western Marmara and Central Anatolia regions and lower for Eastern Marmara and Northeastern Anatolia regions. The highest elasticity belongs to rural Central Anatolia in 2012.

Estimation results indicate that demand for cigarettes is inelastic (Table 70). There is not any statistically significant difference with respect to treatment-control groups; time and rural-urban distinction. However, there is a significant variation regarding NUTS 2 regional classification. The highest elasticity belongs to urban Eastern Blacksea in 2012 and the lowest belongs to rural Western Marmara in 2011.The expenditure for utilities has an income elasticity of 0.098, highly inelastic. The elasticity for the treatment group is lower than that of the control group. All regional interaction dummies are statistically significant and positive indicating that compared to İstanbul all other regions has a higher elasticity.

8.   Conclusion and General Assessment

The majority of respondents expressed that they have migrated to their current residences since early 1970s mainly with the hope of finding an employment opportunity and for better living conditions. 2001 economic crisis played an important role for migration decision. 46 per cent of the treatment group and 43 per cent of the control group migrated after 2001 from rural areas to urban areas. Hence poverty has been restructured in urban areas following this migration wave after the 2001 economic crisis. One of the major differences from the previous migration episodes, the place of migration has changed from village to district. Secondly, support mechanism to the migrants provided by their extended families has been weakened, since the migrants in urban areas tend to have a nuclear family. In our sample 31 per cent of the households are comprised of 4 and 23 per cent of the households are comprised of 5 people. Additionally 96 per cent of the respondents expressed that they do not have any support from their relatives or extended families living in their villages. Hence we can conclude that CCT program provides a compensation mechanism for weakened traditional family support which has been lost because of migration to urban areas from the rural areas.

When socioeconomic status the of the beneficiaries are examined with respect to households' consumption patterns, income, employment, migration, family support network, it emerges that CCT program targeting mechanism generally works fairly. Nearly 22 per cent of the respondents are illiterate and 53 per cent of them have only primary education that lead to difficulties in finding employment. As they could not find employment in their hometowns, they have to migrate to urban areas. The majority of the respondents live in urban areas. Nearly two thirds of the treatment group lives in districts and provinces, the rest lives in villages. For the treatment group these percentages are 75 and 25 respectively. The majority of the respondents are within 26 -45 age group; 80 per cent of them are married. 35 per cent of the treatment group and 30 per cent of the control group own their houses; 30 per cent of all respondents do not pay any rent for their accommodation. The rest pays rent mostly around 151 -300 TL per month. The average family size is either 4 or 5, with one or two children attending school. The highest family size belongs to Southeastern Anatolian region. Nearly 1 per cent of the families have disabled family members. For both groups one per cent of the children under 18 years of age works. Both groups, nearly 90 per cent, expressed their support for female employment and girls' education.

The conclusions from the qualitative and quantitative analysis can be summarized as follows:

8.1. Impact of Conditional Education Transfers

✓   There has been an increase in trust to SYD local funds. Compared to 2011, the ratio of those who believe that local funds are fair in determining the beneficiaries increased in 2012 for both treatment and control groups.

✓   Even though the level of awareness about the implementation of CCT programs is low, there has been a statistically significant increase in 2012 compared to 2011. The percentage of those who are aware that secondary school students receive more monthly CCT compared to pri-

mary school students increased from 34.5 per cent to 37.07 per cent for treatment group in 2012. However, regarding the CCT difference between boys and girls, the awareness is still below 50 per cent. Thus more efforts for publicity are required in order to increase the awareness about the CCT programs.

✓ Empirical analyses indicate that CCT program is effective in reducing the level of child labor. However there has been a statistically significant negative impact on the participation of women in labor force in beneficiary families.

✓ Families expressed their positive opinions about education of their children regardless of their genders. The beneficiaries also expressed that they would have their children educated even if they do not receive any CCT grants.

✓ The percentage of families who state that they face difficulties in receiving grants was stable at around 30 per cent for both 2011 and 2012. This result indicates the necessity of measures for the improvement of the CTT allocation process.

✓ Additionally, empirical results indicate that CCT program has been effective in increasing secondary school enrollment ratios in urban areas. Additionally, secondary school enrollment ratio for girls remained the same for both the treatment and the control groups. Moreover, regarding the regional differences, CCTs positive impact on secondary school enrollment has been greater in Aegean, Central Anatolia, Eastern Blacksea and Southeastern Anatolia regions compared to the reference region İstanbul.

8.2. Impact of Conditional Health Transfers

✓ The conditional health transfers have a positive impact on the attitudes of the families about their children's health. With the introduction of the conditional health transfers, they took their children more often to the health care centers for regular visits even if the children were not ill. There has been a statistically significant increase in the percentage of families who take their children to regular health controls when they are not ill: It has increased from 63.25 per cent to 74.23 per cent in 2011. However the increase in 2012 has been remarkable, from 52.20 per cent to 69 per cent.

✓ The percentage of respondents who express that they have difficulties in accessing health care services remained stable at 18 per cent for the treatment group. Whereas this percentage reached to 37.32 per cent in 2012 from 28.86 in 2011 for the control group. This evidence indicates that the level of satisfaction with the health care services is lower for the control group and it has increased over the year. Thus it can be argued that conditional health transfers have a positive impact on the level of satisfaction of health care services. Regression analysis also supports this finding.

✓ However the level of satisfaction with health care services decreased in urban areas compared to rural areas in 2012. Overall these results indicate the need for an improvement in the delivery of health care services especially in the urban areas.

✓ Additionally compared to the reference region İstanbul, the level of satisfaction with health care services is lower in Aegean, Eastern Marmara, Western Anatolia, Central Anatolia and Western Blacksea, especially in 2012. Thus policies are called for correcting this regional imbalance.

✓ The percentage of families who report that they had difficulties when receiving health transfers remained stable at around 30 per cent and there is not a statistically significant difference with respect to years. Thus corrective measures are also required in this respect.

8.3. Income Elasticities for Expenditure Types

✓ The examination of the elasticities of various types of expenditures reveals that for the urban areas, only the health expenditure has income elasticity greater than one whereas in the rural areas in addition to health, communication expenditures have also income elasticity greater than one.

✓ The expenditure for household utilities, including water, electricity and gas, has the lowest income elasticity, followed by cigarettes expenditures.

✓ The empirical analysis suggests that improvements in income brought by CCT grants will lead to greater increases in health and smoking expenditures compared to other types of expenditures.

9. Policy Recommendations

9.1. Policy Recommendations for Delivery of Transfers to Households

✓ One of the major problems that have been reported by the beneficiaries is the irregularity of the transfers; they claimed that they could not get the transfers on time. The major reason for this disorganization could be the absence of a directive regarding the preparation of the beneficiary lists and allocation of funds. By drafting such as directive in collaboration with the Treasury, Ministry of Finance and related ministries, which regulates the payments to beneficiaries, would solve the problem.

✓ The transfer mechanism should be modified in such a way that takes the regional differences into account

✓ Both the qualitative and the quantitative analysis indicate that the respondents do not have reliable information about the aims, content, targeting mechanism, the conditionality and the organization of the GDSAF. Hence more publicity is required in order to raise the awareness of the public about the CCT program.

9.2. Policy Recommendations regarding the Structure of the Organization

✓ Even though the CCT program in Turkey can be regarded as one of the successful examples in the world, there is paucity of publicity efforts in international arena. Thus there is a great need for a publicity strategy to reach academicians, political decision makers, practitioners and possible beneficiaries. For this end collaboration with Ministries of Health and Education has great importance.

✓ At strategic level a web page which gives information about the program and presents the program outputs can be designed. Printed materials can be distributed. Public relations meetings can be organized at provincial level with the contribution from the nongovernmental

organizations. The existing call centers of the Ministry of Family and Social Assistance can be improved. Publicity meetings with UNESCO, UNICEF and EU can be organized. International and national conferences can be organized.

✓ Qualitative analysis reveals that there are communication problems between local Fund officials in provinces and districts and GDSAF personnel. Efforts should be directed to increase the institutional commitment of especially local Fund officials in provinces and districts.

✓ The physical environments of local funds in provinces and districts can be designed in a way to reflect institutional identity and in the same style.

✓ The local Fund personnel are contracted workers who tend to have more frequent job changes. This may interrupt continuity and consistency of the transfers. Thus in order to preserve the institutional continuity and memory, measures should be taken.

✓ Both qualitative and quantitative analysis reveals that CCT program is most effective in Eastern and Southeastern regions. There should be research efforts towards finding the reasons for ineffectiveness of the program in other regions.

✓ In order to have an efficient implementation of the program, policymakers need to coordinate all stakeholders, such as teachers, principals, village administrators, local fund officials, healthcare workers. Especially teachers should be drawn into the implementation process of the program. In this respect it is of utmost importance to share the findings of this project with the stakeholders. Their feedbacks may improve the implementation of the CCT program.

9.3. Policy Recommendations regarding CCTs

✓ Research indicates that beneficiaries do not mainly regard teachers as an information source regarding the conditional education transfers. Thus there is a need for efforts to increase teachers' awareness about the program and enhance their participation in implementation of the program in collaboration with the Ministry of Education.

✓ Even though e-school database of Ministry of Education provides information about the attendance and school enrollments of the beneficiaries, these data and information flow is unidirectional. Ministry of Education may provide information about the beneficiary families' socioeconomic background and their children' education achievements. Hence a complex database can be created that can be used for policy assessment purposes.

✓ Seasonal agricultural employment is widespread in Turkey. Children of these workers who need to travel to other regions seasonally cannot attend school at their new seasonal residences even though they are enrolled to an education institution at their hometowns. The Ministry of Education can make an arrangement for those children so that they can attend school where their parents find employment

✓ The most important problem regarding the conditional health transfers is the access to data and its reliability. It emerged that there are differences in data storing and maintaining among private and public health care institutions. The existence of reliable and consistent data is of utmost importance for policy making. Thus Ministry of Health should coordinate the up to date data keeping that is consistent throughout the private and public institutions.

✓ Health education programs can be designed for mothers in collaboration with Ministries of Health and Education, nongovernmental organizations, and local administrative bodies.

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