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An empirical approach about some important features of child labor in Turkey

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The study examines effects of some factors on the child labor force in Turkey such as the level of education of household heads determining the child labor, the features of geographical region where the household live and sex of working children. It is a motivation tool of opting for this subject in a developing country having a young population that there are few empirical studies concerning the fact of child labor. The empirical results obtained from non-conditional probability and probit analyses show that the employment rates of boys are higher than that of girls in both urban and rural regions. The education level of decision-makers of household in rural areas is lower than that of in urban regions and accordingly child labor employment rates in rural regions is higher than the same rates in urban regions. These facts mean that the lower the level of education of household heads is, the higher the child labor becomes. That is, when the education level of decision-makers decreases in rural areas, the child labor becomes more common.

JEL Classifications: J82, R20

Keywords: Child labor, education, rural, urban, sex, Turkey.

Introduction

The fact of child labor force is one of the primary concerns of developing countries. This study suggests that the decision maker of child labor is household head rather than any person at home. Supposing the decisions of household heads as the reference point, this study has been built within the frame of an economic model having testability with empirical methods. It is one of the motivation tools of choosing this subject in a developing country having a young population: there are few empirical studies concerning the fact of child labor in Turkish literature. Directing the developing economies to the right direction and sorting out the problems that may be encountered in this course are among the fundamental duties of governments and politicians.

The findings of the study reveal that the problem of child labor force in Turkey is more common in rural regions and the education level of household heads deciding the child labor is lower again in rural regions, accordingly. This situation springs to mind that enhancing the education level of parents who are the decision-makers of child labor may play one of the key roles in sorting out this problem. The Turkish Government, to be able to find a solution to the problem of child labor in its developing country should increase the education level of adults capable of affecting the decision-making mechanism especially in rural regions. In the following section are the literature and the theoretical frame and other titles after the literature are the model concerning the study, data, assumptions, borders and findings.

[1] This paper has been paper prepared from Hakan Acaroglu's Ph.D thesis "An approach to child labor in Turkey from the perspective of human capital: Poverty, child labor and human capital cycle" developed at Anadolu University Graduate School of Social Sciences, the Department of Economics.

Literature and theoretical frame

The child labor arising from the decisions of household heads is affected by the education levels of parents, sex differences of children and the features of lived-in geographical region. It can be possible to add some other factors but the focused-on effects are limited to those mentioned above by virtue of the scope of the study.

When considered the examples of worldwide studies, it can be found that according to Khanam (2004) age, sex and education level of parents are among the factors determining the child labor. When estimating the probability of Peruvian children's attendance to labor force, Tienda (1979) has indicated that the working probability of boys becomes higher especially at increasing ages. In addition to this, she has proved the effect of education level of household heads to the child's starting to work. According to Tienda, the participation of children living in rural areas into labor force is considerably higher than that of children living in urban areas.

When examined the examples of studies made in Turkey, Tunalı (1996) has indicated that the age and sex of the child, the education level of his/her parents and the condition of the area are significant and decisive to child labor force. According to Tunalı, elder children and the children having undereducated parents have more tendencies in participating into the labor force. Dayıoglu (2006) have also reached the results supporting those of Tunalı. As well as underlining similar findings, she puts an emphasis on being able to expect a 0.5 or 0.7% decrease in child employment with a one-year extra education of parents.

In the following sections, examples of international and Turkish studies given in the scope of the study and multiplied according to the subtitles are presented; thus, it has been tried to determine the border of theoretical frame which could be acquired from the literature.

Household decisions and the active role of household head in decision-making process

The household decisions are the ideational acts made under the domination of household head in terms of effectiveness and determining an important issue about whether the child at home is going to study. The families influenced by social pressure and socio-cultural factors stemming from geographic conditions are the ultimate decision-makers of making their children work. It is under the control of parents and especially the household heads how a child spends his/her childhood and improves his/her intellectual and psycho-social development. By providing the estimation of the extent of effects of education levels of household heads on boys' and girls' participation into the labor force in rural and urban regions of Turkey, the approach in this study reflects the perspective of being able to make an assessment.

Education levels of parents

The education levels of parents affect the decisions given when deciding whether the child participate into the labor force (ILO, 1992; Grootaert and Kanbur, 1995; Patrinos and Psacharopoulos, 1997; Grootaert, 1998; Salmon, 2005). Consequently, this issue is accepted as an important factor affecting the child's working (Dayıoglu, 2006). According to Tansel (2002), one of the most important factors affecting the education status of children is the level of education of the parents, as well. As reiterated by Grootaert (1998), when considered that the attendance to school is one of the most vital ways of keeping the children away from the labor market, the factors affecting the parents' making such a decision become more of an issue. According to Hussain and Maskus (2003), the increase in the education levels of parents has strong effects on decreasing the child labor.

The education levels of parents and especially mothers' level of education being high will make mothers lodestar of their children and the mothers' playing such a role will be

effective in directing the child to the school instead of the labor. The mothers' being educated not only decreases the children's working probability and increases the girls' enrolling to a school but also has a positive effect on the health of children (International Labor Conference, 2006). According to Grootaert (1998), while the education level of fathers mostly affects the boys, the education level of mothers mostly affects the girls. It is an eventuality that the parents having higher education create a high demand in directing their children to school since the parents who have higher education place great importance on the education of their children. Therefore, children are directed to school instead of working (Khanam, 2004).

Sex differences

Another factor affecting heading for the child labor in household is sex differences. The sex and age of the child is a determining factor of working probability (Grootaert, 1998). Boys are more exposed to child labor, especially having a hazardous nature, than girls in terms of sex. The difference becomes more pronounced with increasing age (International Labor Conference, 2006). According to a finding supporting this view, boys' risk of being a part of labor is higher than that of girls (Dayıoglu, 2006). In his assessment of developing countries, Edmonds (2007) indicates that while boys have higher rates of participation into the labor force than girls, the situation is contrary in household chores. According to Edmonds and Turk (2001), girls have a higher tendency to work than boys in all age groups. The difference becomes more obvious particularly in household chores.

Urban and rural regions

The rate of participation into child labor employment in a country could be found through geographical factors. According to Edmonds (2007), children have a higher tendency to work much and for longer hours in rural regions than urban regions. Grootaert (1998) suggests the rate of participation into child labor in Ivory Coast is higher in rural regions than that of urban regions and reveals the reason of this situation by pointing out the poverty. Neumayer and Soysa (2005) remark that the child labor is more common due to lots of reasons in rural regions than urban regions, as well. As one of the reasons of this situation it can be suggested that the agriculture based economy is the most convenient sector for child labor (Ahmed, 1999; ILO, 2002). Other reasons are the quality of education system and the attendance to school being lower in rural regions than in urban regions. In addition, the higher levels of education of parents in urban regions make them more involved in education of their children (Edmonds and Pavcnik, 2002). Furthermore, the social and cultural norms in rural regions have a more traditional pattern than those of urban regions and this issue increases the social acceptability of child labor (Lopez-Calva, 2001).

Theoretical frame

The theoretical frame has been composed in consideration of the data filtered according to the scope of the study from child labor literature of the world and Turkey. In this process, household decisions and the active role of household head in the process of deciding the child labor, which can be considered as the existence reason of the fact of child labor force in Turkey, have been discussed. Besides this reason, the factors such as the importance of education levels of parents, the special conditions stemming from sex differences and the features of geographical region where the household live constitute the borders of theoretical frame of the study.

Table 1 shows the data of population by age group and sex, employment and rate of employment collected from the labor force survey of TurkStat covering the months of October, November and December of 2006. According to results of the survey, there are 72 958 000 people living in Turkey by non-institutional population data. 13 474 000 of

them are employed in urban areas and 9 491 000 are employed in rural areas. While the employment rate in urban areas is 33.2%, the same rate in rural areas is 39.8%. The employment rate of the children who are between 6 and 17 years and other persons who can be considered as children is 5.9%. The employment rate of children in urban areas goes back to 4.6%; nevertheless, this rate increases up to 7.9% in rural areas. The employment rate of boys in Turkey-wide is 16.9%. While 9.6% of boys are employed in rural regions, 6.6% is employed in urban regions. The employment rate of girls in Turkey-wide is 4%. 6.3% of girls are employed in rural areas but 2.5% is employed in urban areas. In accordance with the literature, the employment rate in terms of child labor force in Turkey in rural areas is higher than that of in urban areas, both in the rate of boys and that of girls. Furthermore, the employment rate of boys is higher than that of girls in both areas and throughout Turkey, accordingly.

TABLE 1. TURKEY: NON-INSTITUTIONAL CIVILIAN POPULATION AND EMPLOYMENT BY AGE GROUP AND SEX
(in thousands)

October, November, December of 2006	Non-institutional civilian population			Engaged in economic activity (Employed)			Employment rate (%)		
Age group and sex	Rural	Urban	Turkey	Rural	Urban	Turkey	Rural	Urban	Turkey
Total	27.190	45.769	72.958	9.491	13.474	22.963	39.8	33.2	35.6
6-17	6.363	9.901	16.264	501	457	958	7.9	4.6	5.9
6-14	4.976	7.502	12.478	205	116	320	4.1	1.5	2.6
15-17	1.387	2.399	3.786	297	341	638	21.4	14.2	16.9
Male									
Total	13.319	23.062	36.379	6.375	10.635	17.011	55.0	52.0	53.1
6-17	3.094	5.099	8.192	295	337	638	9.6	6.6	16.9
6-14	2.456	3.831	6.286	123	85	207	5.0	2.2	3.3
15-17	638	1.268	1.906	173	252	425	27.1	19.9	22.3
Female									
Total	13.485	22.707	36.579	3.116	2.839	5.952	25.4	14.1	18.3
6-17	3.503	4.802	8.072	206	120	326	6.3	2.5	4.0
6-14	2.517	3.671	6.192	82	31	113	3.3	0.8	1.8
15-17	986	1.131	1.880	124	89	213	16.6	7.9	11.3

Source: This table is formed according to TurkStat (2006), Child Labour Statistics.

The overview of child labor in Turkey offering the theoretical frame, the borders of which has been specified by the data filtered from the literature according to the scope of the study, is given above. In addition to these, the economic model where the data concern the education level of household heads has been discussed in the following section.

Model

Firstly, the general introduction of the table of non-conditional probability, which offers the education levels of household heads deciding the child labor, will be given about the economic model of the study. After this introduction, the statistical significance of the factors, all of which are also underlined by the literature and thought to be having an effect on the originating of child labor such as the education level of household heads, the geographical region which is lived in and sex of working children, are going to be analyzed

separately and wholly using the probit analysis method; and the model which is used for measuring their power of efficiency is going to be introduced.

Definition of non-conditional probabilities

Table 2 shows the education level of household heads separated by the criteria of whether his/her child who is between 6 and 17 years is employed or not in urban areas. The condition determining the education level has been constituted as a result of an assumption used in this study. The level of education has been classified in itself as households: 1) literate but completed no school; 2) completed primary school (5 years); 3) completed primary education, junior high school or vocational junior high school; 4) completed high school; 5) completed vocational junior high school; 6) completed higher education. According to this assumption, with a classification of education levels from 1 to 6 and the bigger the point is, the higher the level becomes, the condition of the education level of household heads being higher than 3 means that the household head is high school or higher education graduate.

TABLE 2. THE EDUCATION LEVEL OF HOUSEHOLD HEAD WHOSE SON OR DAUGHTER IS EMPLOYED IN URBAN AREAS

Is his son or daughter employed in child labor? (6-17)	Does household head have a high education level? Education level >3; High school, Vocational High School, Higher Education		
	No	Yes	Total
No:			
Number	11135	4548	15683
Row(%)	71.00	29.00	100.00
Column(%)	94.48	98.72	95.67
Yes:			
Number	650	59	709
Row(%)	91.68	8.32	100.00
Column(%)	5.52	1.28	4.33
Total			
Number	11785	4607	16392
Row(%)	71.89	28.11	100.00
Column(%)	100.00	100.00	100.00

Source: The table is obtained by TurkStat (2006) database query.

In consideration of these definitions, Table 2 indicates that according to the total numbers containing the assumption of whether the child is employed or not, there are 16 392 household heads. In the condition of the education levels of household heads being no more than 3, there are 11 785 household heads which makes a 71.89%. As for the condition in which the education level of household heads is higher than 3, there are 4 607 household heads (28.11%).

In the condition of neither boy nor girl is employed and in the condition where the education level of household heads is no more than 3, there are 11 135 household heads (71%); but in the condition where the education level of household heads is higher than 3, there are 4 548 household heads (29%).

In the condition of either boy or girl is employed and in the condition where the education level of household heads in no more than 3, there are 650 household heads

(91.68%); but in the condition where the education level of household heads is higher than 3, there are 59 household heads (8.32%).

Robustness tests: Probit analysis

This section provides testing with probit analysis for the factors affecting the child labor force: education level of household in Equation 1; nature of geographical region in Equation 2; effects of sex of working children in Equation 3; all these factors in Equation 4.

$$Child\ labor_i = \alpha + \beta 1\ Household\ head\ education\ level_i + \varepsilon_i \quad (1)$$

$$Child\ labor_i = \alpha + \beta 2\ Urban_i + \varepsilon_i \quad (2)$$

$$Child\ labor_i = \alpha + \beta 3\ Sex_i + \varepsilon_i \quad (3)$$

$$Child\ labor_i = \alpha + \beta 1\ hausehold\ head\ education\ level_i + \\ + \beta 2\ urban_i + \beta 3\ sex_i + \varepsilon_i \quad (4)$$

Explanations of data, assumptions and borders of study

The data used in this study has been acquired from the TurkStat's data set of Working Children survey. The data of the survey were collected in October, November and December 2006. The age group of survey is between 6 and 17 years. While the sample size of the survey throughout Turkey is 38 039, the size of urban areas is 26 566 and of rural areas is 11 473.

There are about 20 000 households or families in this research. The types of household not carrying the features of so called immediate family are excluded in accordance with the assumption of the study. According to this approach, the immediate family is accepted as having both of parents and as a result of this assumption; it is thought to be exempt from some sociologic factors which may affect the child labor. In compliance with this assumption, the number of immediate families surveyed in this research is 13 428 and the number of observations becomes 24 766 when included the surveyed children of these families. It is possible to reach both the special data of either mothers or fathers such as the level of education and those of household heads. The child labor in some studies is defined for the children between 6 and 14 years but the age range selected for this study is between 6 and 17 years. The reason of this selection is that most of child laborers are between 15 and 17 years. Besides, according to the acceptance of the survey of TurkStat (2006), the "non-institutional working age population" is defined as the 6-17 age groups in non-institutional population. In addition to this approaches, it is beneficial to explain the definitions used frequently and having an importance. Being one of these definitions, the "employed" are the persons who worked in any day in the reference week for at least 1 hour for wage or profit or the unpaid family workers working for the earning of the family and who are regular employees not having worked on their job for several reasons in the reference period but have a regular relationship with his/her job.

Some variables thought to be necessary in economic model but not available in the data set directly has been derived from assumptions. The data of education levels of household heads used in the study could be given as an example of these. In the data set, there is a classification of schools from which the households graduated. According to an acceptance, this classification has been separated into two groups in first of which the value of "0" meaning uneducated has been appointed to the graduation value data and in second of which the value of "1" meaning educated has been appointed to the data of graduation value. Therefore, the education level of households has been constituted presumptively.

Findings

This section where the findings of the study have been given in constituted of two subtitles. In the first subtitle it is suggested that the non-conditional probability tables acquired from examining the TurkStat data of child labor and the evaluation and interpretation concerning the tables. As for the second subtitle, the statistical results of robustness tests obtained by testing the economic model with probit analysis and assessments of these results have been given.

Results of data query: Non-conditional probability tables and their interpretations

Table 2 suggests the rates of education levels of household heads and the rates of children employment in child labor force of Turkey in 2006 in urban regions in accordance with the basic definition of child labor (being employed at the ages that can be defined as childhood) without sex classification. Table 2 shows that the rate of employment of children between 6 and 17 years in child labor force is 4.3%. Of these children, the rate of those who have a well-educated household is 28.1%. Moreover, the employment rate of boys or girls of well-educated households in child labor is 1.3%. On the other hand, the employment rate of boys or girls of under-educated households in child labor is four times higher with 5.5%. This situation makes it clear that in urban regions of Turkey, the lower the education level of households is, the higher the employment rate of children in child labor becomes.

TABLE 3. THE EDUCATION LEVEL OF HOUSEHOLD HEAD WHOSE SON IS EMPLOYED IN URBAN AREAS

Is his son employed in child labor? (6-17)	Does household head have a high education level? Education level >3; High school, Vocational High School, Higher Education		
	No	Yes	Total
No:			
Number	5612	2350	7962
Row(%)	70.48	29.52	100.00
Column(%)	92.11	98.16	93.81
Yes:			
Number	481	44	525
Row(%)	91.62	8.38	100.00
Column(%)	7.89	1.84	6.19
Total			
Number	6093	2394	8487
Row(%)	71.79	28.21	100.00
Column(%)	100.00	100.00	100.00

Source: The table is obtained by TurkStat (2006) database query.

Table 3 shows the education level of households in urban areas according to the criteria of whether their boy aged between 6 and 17 is employed or not. According to the table, the employment rate of boys in child labor is 6.2%. Of these children, the rate of those who have a well-educated household is 28.2%. Moreover, the employment rate of boys of well-educated households in child labor is 2%. However, the employment rate of boys of under-educated households in child labor is four times higher with 8%. These results make it obvious that in urban regions of Turkey, the lower the education level of households is, the higher the employment rate of boys in child labor becomes.

TABLE 4. THE EDUCATION LEVEL OF HOUSEHOLD HEAD WHOSE DAUGHTER IS EMPLOYED IN URBAN AREAS

Is his daughter employed in child labor? (6-17)	Does household head have a high education level? Education level >3; High school, Vocational High School, Higher Education		
	No	Yes	Total
No:			
Number	5523	2198	7721
Row(%)	71.53	28.47	100.00
Column(%)	97.03	99.32	97.67
Yes:			
Number	169	15	184
Row(%)	91.85	8.15	100.00
Column(%)	2.97	0.68	2.33
Total			
Number	5692	2213	7905
Row(%)	72.01	27.99	100.00
Column(%)	100.00	100.00	100.00

Source: The table is obtained by TurkStat (2006) database query.

In Table 4 it is given that the education level of households in urban areas according to the criteria of whether their girl aged between 6 and 17 is employed or not. According to the table, the employment rate of girls in child labor is 2.3%. Of these children, the rate of those who have a well-educated household is 28%. Furthermore, the employment rate of girls of well-educated households in child labor is 1%. Nevertheless, the employment rate of girls of under-educated households in child labor is three times higher with 3%. These results make it obvious that in urban regions of Turkey, the lower the education level of households is, the higher the employment rate of girls in child labor becomes.

Analysis from Table 3 and Table 4 suggests that uneducated situation of household heads in urban areas affects almost equally both the male and female children.

TABLE 5. THE EDUCATION LEVEL OF HOUSEHOLD HEAD WHOSE SON OR DAUGHTER IS EMPLOYED IN RURAL AREAS

Is his son or daughter employed in child labor? (6-17)	Does household head have a high education level? Education level >3; High school, Vocational High School, Higher Education		
	No	Yes	Total
No:			
Number	6814	909	7723
Row(%)	88.23	11.77	100.00
Column(%)	91.68	96.50	92.23
Yes:			
Number	618	33	651
Row(%)	94.93	5.07	100.00
Column(%)	8.32	3.50	7.77
Total			
Number	7432	942	8374
Row(%)	88.75	11.25	100.00
Column(%)	100.00	100.00	100.00

Source: The table is obtained by TurkStat (2006) database query.

TABLE 6. THE EDUCATION LEVEL OF HOUSEHOLD HEAD WHOSE SON IS EMPLOYED IN RURAL AREAS

Is his son employed in child labor? (6-17)	Does household head have a high education level? Education level >3; High school, Vocational High School, Higher Education		
	No	Yes	Total
No:			
Number	3280	444	3724
Row(%)	88.08	11.92	100.00
Column(%)	90.33	94.07	90.76
Yes:			
Number	351	28	379
Row(%)	92.61	7.39	100.00
Column(%)	9.67	5.93	9.24
Total			
Number	3631	472	4103
Row(%)	88.50	11.50	100.00
Column(%)	100.00	100.00	100.00

Source: The table is obtained by TurkStat (2006) database query.

Table 5 suggests the education level of households in rural areas according to the criteria of whether their children aged between 6 and 17 are employed or not. According to the table, the employment rate of children in child labor is 8%. Of these children, the rate of those who have a well-educated household is 11%. Besides, the employment rate of children of well-educated households in child labor is 4%. On the other hand, the employment rate of boys or girls of under-educated households in child labor is two times higher with 8%. These results make it clear that in rural regions of Turkey, the lower the education level of households is, the higher the employment rate of their children in child labor becomes.

TABLE 7. THE EDUCATION LEVEL OF HOUSEHOLD HEAD WHOSE DAUGHTER IS EMPLOYED IN RURAL AREAS

Is his daughter employed in child labor? (6-17)	Does household head have a high education level? Education level >3; High school, Vocational High School, Higher Education		
	No	Yes	Total
No:			
Number	3534	465	3999.00
Row(%)	88.37	11.63	100.00
Column(%)	92.98	98.94	93.63
Yes:			
Number	267	5	272.00
Row(%)	98.16	1.84	100.00
Column(%)	7.02	1.06	6.37
Total			
Number	3801.00	470.00	4271.00
Row(%)	89.00	11.00	100.00
Column(%)	100.00	100.00	100.00

Source: The table is obtained by TurkStat (2006) database query.

Table 6 shows the education level of households in rural areas according to the criteria of whether their boy aged between 6 and 17 is employed or not. According to the table, the employment rate of boys in child labor is 9%. Of these children, the rate of those who have a well-educated household is 12%. Moreover, the employment rate of boys of well-

educated households in child labor is 6%. However, the employment rate of boys of under-educated households in child labor is about two times higher with 10%. These results make it evident that in rural regions of Turkey, the lower the education level of households is, the higher the employment rate of boys in child labor becomes.

In Table 7 it is given that the education level of households in rural areas according to the criteria of whether their girl aged between 6 and 17 is employed or not. According to the table, the employment rate of girls in child labor is 6%. Of these children, the rate of those who have a well-educated household is 11%. Besides, the employment rate of girls of well-educated households in child labor is 1%. But, the employment rate of girls of under-educated households in child labor is seven times higher with 7%. These results make it obvious that in rural regions of Turkey, the lower the education level of households is, the higher the employment rate of girls in child labor becomes.

Analysis from Table 6 and Table 7 indicates that uneducated situation of household heads in rural areas increases girls' employment rate more than boys.'

Robustness tests results: Probit analysis

The economic model is tested by probit analyses. According to statistical analysis in the first step, the relationship between the child labor participation rate and education level of household head is tested. In the second step, the relationship between the child labor participation rate and child labor in urban areas is tested. In the third step, the relationship between the child labor participation rate and children's sex difference that is represented by "male children" is tested. And in the last step, the relationship between the child labor participation rate and those three variables are tested all together. The results of probit analyses and Table 8 shows that: 1) The variable "education level of household head is found as significant and negatively related with child labor participation rate; 2) The variable "child labor in urban areas" is found as significant and negatively related with child labor participation rate; 3) The variable "sex" difference that is represented by "male children" is found as significant and positively related with child labor participation rate; 4) Those three variable that are stated above individually are found as all together affecting child labor participation rate that is not differently stated as in those three steps.

TABLE 8. ROBUSTNESS TESTS RESULTS: PROBIT ANALYSIS ON CHILD LABOR EMPLOYMENT

Variables	First Step, Observation =24766, pseudo2 = 0.0243		Second Step, Observation =24766, pseudo2 = 0.0115		Third Step, Observation =24766, pseudo2 = 0.0136		Fourth Step, Observation =24766, pseudo2 = 0.0462	
Child labor	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
Household head education level	-.62375	-.04382***					-.58793	.02733***
Urban			-.29369	.02653***			-.24817	.02733***
Sex(male)					.31857	.02694***	.34476	.02763***
Cons.	-1.50639	.01139***	-142043	.02011***	-1.78106	.02106***	-1.56041	.02592***

Conclusion

The study has examined effects of some factors on the child labor force in Turkey such as the level of education of household heads determining the child labor, the features of geographical region where the household live and sex of working children. The findings have proved that these factors have a significant effect on the child labor force.

The education levels of households have been evaluated through the non-conditional probability tables acquired from examining the data of TurkStat (2006) Working Children

survey. According to the findings obtained through examination, the employment rates of boys are higher than those of girls in both urban and rural areas. The education levels of decision-makers of households are lower in rural areas than those of in urban areas and the rate of child labor employment is higher in rural areas than that of in urban areas. These findings suggest that as the education level of households decrease, the child labor increase and the lower the education levels of decision-makers of households in rural areas are, the more common the child labor in these regions becomes. As for sex differences when it comes to employment, boys are made to work much more than girls throughout Turkey. In addition to this, in urban areas the uneducated situation of household heads is affecting both the male and female children almost equal. But in rural areas this situation change. In this case, the uneducated situation of household heads increases girls' employment rate more than boys'.

According to the results of robustness tests acquired from probit analysis, it can be concluded that the education level of household heads whose child is employed in child labor force, the sex (male) of working children, the geographical region where the households live in negatively affect the employment of children in child labor. Thus, it can be said that if the education levels of household heads or decision makers of households is increased, the problem of child labor force could be reduced or eliminated. This finding being a matter of Turkey refers to the necessary measures that the government has to take when dealing with this social problem.

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