CHAPTER VII
DETERMINANTS OF CHILD LABOUR

Introduction

To get a quantitative assessment of the incidence of child labour, logistic regression was used because the y-variable (Child labour) is categorical and discrete, linear regression was not an option as the explanatory variables are also categorical, and logistic regression is better suited to such a situation, with the outcome being expressed in “odds ratios” rather than predicted values. A linear (or non-linear) regression would have given the $R^2$ unrealistically low because the overall incidence of child labour in Haryana is only about 4%. Correspondingly, while the value of a particular variable like social group may not directly imply the incidence of child labour (accounting for the low $R^2$), it can be seen from some data analysis that, among working children, the probability of the family belonging to a particular social group is much higher than another. This result is encapsulated in the odds ratios that will be provided by the logistic regression. A logistic regression exercise has therefore been undertaken to ascertain the following:

1) To obtain the odds of a child being in the labour force, in household chores or neither in labour force nor in household chores and neither in school, given the variations in the social groups, landholding size, household type, poverty level and educational level of the head of the household.

2) To obtain the odds of a child being in labour force, in household chores or neither in labour force nor in household chores and neither in school when variables (social and economic) that influence child behaviour are controlled.

This chapter has been divided into two broad sections. The first section examines the logistic regression output that gives us the odds of a child being in the labour force, in household chores and in school given the variations in the social groups, landholding size, livelihood categories, poverty level and the education of the family head. The second section of this chapter seeks to examine, ceteris paribus, the determinants of child labour and child schooling. The analysis of the determinants of child labour, child work, ‘nowhere’ children and school is based on logit estimation of a child’s participation in the labour market, in

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domestic chores and in schooling, regressed on a selection of individual and household socio-economic characteristics.

**Section I**

**Child Labour**

The aim of this section is to analyse the odds of children being in the labour force given the variation in the social groups, landholding size, household type, poverty levels and educational level of the head of the household.

**Social Group Reference ‘Others’**

The odds ratio of child labour versus social group throws up a very dramatic result. Children from SC social group are 4.63 times more likely to be involved in child labour than children from non-SC social group. Note that here “Other” (Social Group level 3) has been taken as the reference group against which all the other groups are being compared. Generally, an odds ratio of 2.5 and above is interpreted as indicating a strong relationship between the variables being analysed, so the ratio of 4.63 here suggests an extremely strong relationship between the social background of the child’s family and the incidence of child labour in the household. The children from the OBC social group are much more likely to be involved in child labour than children from the “Other” category – specifically, nearly 2 times more likely.

**Land Size Reference- ‘Very Large Land Holdings’**

a) Landless : have 4.29 times significantly higher odds of being in the labour force than the rest.  
b) Marginal: have 43.43 times significantly higher odds of being in the labour force than the rest.  
c) Small : have 0.41 times significantly higher odds of being in the labour force than the rest.  
d) Medium : have 25.05 times significantly higher odds of being in the labour force than the rest.  
e) Large : have 0.38 times significantly higher odds of being in the labour force than the rest.
This regression is done using category 6 of landholding size, “very large landholdings” - defined as holdings in the size range of 10 acres and above - as the reference category. We find that a child who belongs to households with marginal landholding size has the highest odds of being in labour force as against the rest of the households. Among the landed households, a child belonging to households with medium landholding size has the second highest odds of being in labour force. One would have expected the children from small landholding households to have a higher odd of being in labour force than the child belonging to medium landholding size. If we recall from our data analysis in the earlier chapter we find that the households with medium landholding size with the incidence of child labour are found in the agriculturally less developed region of Haryana. Significantly, farmers having both large and very large holdings have lower odds of child labour as compared to the smaller size of land holding, corroborating the trend that the incidence of child labour generally has an inverse relationship with the size of landholding. Moreover, this relationship is stronger in the agriculturally developed regions as compared to less developed agricultural regions.

**Household type Reference- ‘Self Employed in Agriculture’**

a) Self Employed in Non-Agriculture : have 1.05 times significantly higher odds of being in the labour force than the rest.

b) Agricultural labour : have 1.83 times significantly higher odds of being in the labour force than the rest.

c) Other labour : have 1.17 times significantly higher odds of being in the labour force than the rest.

d) Non-Self Employed/Non-Labour : have 0.66 times significantly higher odds of being in the labour force than the rest.

Taking self-employed in agriculture (SEA) as the base case, we find that both agricultural labourers (AL) and other labour have moderately higher odds of being involved in child labour than the rest of the livelihood categories of the households. As against this, the odds of a child being in labour force are comparatively lower for the households who are self-employed in non-agricultural activities. Thus, we find that the children who belong to households which are involved in wage or manual labour in either agriculture or outside of it
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have the highest odds of being in labour force as compared to the households who own some assets in the form of land or capital.

Poverty level Reference- 'Non Poor'

The logistic regression output for child labour versus poverty indicates a fairly strong association between poverty and child labour – children from poor households (as defined in this thesis – all households having less than Rs. 319 monthly per capita expenditure) are 3.60 times as likely to be involved in labour as children from non-poor households.

Literacy Level of the Head of the Household Reference – ‘Literate’

a) Illiterate : have 1.95 times significantly higher odds of being in labour force as compared to literates.

b) Below Primary : have 8.9 times significantly higher odds of being in labour force as compared to rest.

c) Primary : have 5.29 times significantly higher odds of being in labour force as compared to rest.

d) Middle : have 1.66 times significantly higher odds of being in labour force as compared to rest.

e) Secondary and Higher Secondary : have 0.00 times significantly higher odds of being in labour force as compared to rest.

f) Graduate and Above : Reference Category.

The logistic regression output for child labour versus the educational level of the head of the household indicates a strong association between education and child labour – children from households whose parents are illiterate are about 2 times likely to be involved in child labour as compared to children from households where parents are literate.

Further, we have also seen the odds of a child being in labour force given the standard of education that their parents have studied up to. It is evident from the regression output that children who belong to households where the person heading the family is educated below primary stage of schooling have the highest odds of being in labour force. Next, a child who belongs to households where the family head has completed primary level of schooling has the highest odds of being in the labour force. We observe that as we go up
the educational ladder, the odds of a child being in the labour force starts declining thus, indicating that parent’s education can reduce participation of children in labour activities.

From the above logistic regression analysis of child labour it is found that a child from the backward caste is more likely to be involved in the labour force as compared to the child from the upper caste. The landholding size that a household operates plays a strong and significant role in determining the child’s chances of being in the labour force. Children who belong to households which are landless and from households with marginal landholding size are more likely to join the labour force as compared to children from the households owning larger land size. This inverse relationship between land size and incidence of child labour becomes weak in the agriculturally less developed regions. As the results indicate, odds of the children who belong to households with medium landholding size joining the labour force are also high. According to the data, the households with medium landholding size are present in the agriculturally less developed regions (Siwalik and Aravalli) of Haryana. The size and the significance of the estimated coefficient of the livelihood categories and its relationship between child labour indicates that children from economically vulnerable wage labour households are more likely to be involved in labour force as compared to the self-employed households. Furthermore, the significance of the poverty coefficient confirms the strong positive link that exists between child labour and poverty- economic deprivation according to our results is a major cause of child labour. And as we go up the educational ladder, the odds of a child being in the labour force starts to decline, thus, indicating that parent’s education can reduce participation of children in labour activities.

**Child Work**

The following sections examines the odds of a child being engaged in domestic work given the variation in the social groups, landholding size, livelihood category, poverty levels of the households and the educational level of the family head.

**Social Groups Reference ‘Others’**

a) SC : have 4.24 times significantly higher odds of being engaged in household chores than the rest.

b) OBC : have 1.08 time significantly higher odds of being engaged in household chores than the rest.
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Looking at the social stratification and the implications of the caste background of a child being in labour force or not, the dependent variable is regressed on the broad caste category of the household. The regression reveals that among all social groups, the SC children have the highest odds of being in the labour force as compared to the rest of the social groups. The SC group is followed by the OBC children who have comparatively lower odds as compared to SC children of being involved in household chores, while children from the ‘others’ social group have the lowest odds.

Land Size Reference ‘Very Large land holdings’

a) Landless : have 30.72 times significantly higher odds of being engaged in household chores than the rest.

b) Marginal : have 20.74 times significantly higher odds of being engaged in household chores than the rest.

c) Small : have 7.03 times significantly higher odds of being engaged in household chores than the rest.

d) Medium : have 7.39 times significantly higher odds of being engaged in household chores than the rest.

e) Large : have 13.92 times significantly higher odds of being engaged in household chores than the rest.

The regression has been done using categories of landholdings, “very large landholdings” – defined as holdings in the range of 10 acres and above as the reference category. The results indicate that the children belonging to landless households have the highest odds of being engaged in household chores as against the children from the landed households. Among the children who belong to landed households, the children who belong to households with marginal landholding size have the highest odds of working in household chores as compared to the rest of the households. Surprisingly, children from the households with large landholding size have comparatively higher odds of working in domestic chores and not going to school as compared to households of small and medium landholding size. A higher odd of children working in domestic chores from households with large landholding size implies that despite their large asset base in the form of land, girls of these households do not go to school. Non-attendance in school of children in households with large landholding

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size is not due to economic factors but probably due to gender bias against the girls schooling, lack of school infra-structural facilities in the village or lack of awareness of benefits of education by the parents of these children.

**Household Type Reference-‘Self-Employed in Agriculture’**

a) **SENA** : have 0.65 times significantly higher odds of being engaged in household chores than the rest.

b) **AL** : have 3.08 times significantly higher odds of being engaged in household chores than the rest.

c) **OL** : have 0.99 times significantly higher odds of being engaged in household chores than the rest.

d) **OTH** : have 0.36 times significantly higher odds of being in labour force.

Taking self-employed in agriculture as the reference, it is found that children who belong to agricultural labour household have the highest odds of being engaged in domestic chores than the children from the rest of the livelihood categories. Following these households are the children from households who depend on wages from the non-agricultural sector who have the highest odds of being engaged in household chores at the cost of their studies. Next, the odds are the highest for those children who belong to households self employed in non-agricultural activities. The odds of working in domestic chores are the lowest in non-self employed and non-labour households i.e. regular salaried. From the above analysis it appears that children who belong to households which are dependent on wages for their income are needed to work at home at the cost of their schooling whereas, those households who own some land or capital which reflects their economic strength are at a lower risk of working in domestic chores.

**Poverty Level: Reference – ‘Non-Poor’**

The regression output for child work versus poverty indicates a fairly strong association between poverty and child work i.e. children from poor households are 4.87 times likely to be involved in household chores without being in school as compared to children from non-poor households.
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**Literacy Level of the Head of the Household Reference – 'Literate'**

- **a) Illiterate**: have 12.26 times significantly higher odds of working in household chores compared to the rest of the literates.
- **b) Below Primary**: have 35.56 times significantly higher odds of working in household chores compared to rest.
- **c) Primary**: have 29.39 times significantly higher odds of working in household chores compared to rest.
- **d) Middle**: have 6.41 times significantly higher odds of working in household chores compared to rest.
- **e) Secondary and Higher Secondary**: have 0.39 times significantly higher odds of working in household chores compared to rest.
- **f) Graduate and Above**: Reference Category.

In order to study the ways in which education affects the chances of girls working in household chores at the cost of their schooling, the level of education of the head of the household has been taken as the determining factor. The first result of the regression of the dummy variable working in household chores/otherwise on education reveals that odds of girls working in household chores are much higher for those girls whose household head is illiterate as compared to those where the head of the household is literate. Further, among the children whose household head is literate, the odds of girls working in household chores at the cost of their schooling are the highest for those girls who belong to households whose head is educated below primary level followed by those girls who belong to households whose household head has completed primary stage of schooling. The odds are the lowest for those girls who belong to the household where household heads are educated above secondary or are graduate and above. Thus, the result clearly indicates that parental education can reduce child work. Educated parents are able to help their children through the schooling process as they would value the experience more and encourage their own children to attend school there by decreasing the probability of the children being involved in work at the cost of their schooling.
Hence, it is evident from the above analysis that:

(i) Among the social group, girls from the lower caste i.e. the schedule caste have higher odds of working in household chores at the cost of their schooling as compared to the upper caste i.e. the OBC’s and the ‘others’.

(ii) Girls belonging to landless households have the highest odds of working in household chores as against the children from the landed households. This gives an indication to the inverse relationship between child work and size of landholdings. Girls from households with marginal landholdings which are economically vulnerable households, have higher odds of being engaged in household chores at the cost of their schooling as compared to the larger land size holdings.

(iii) Girls from households which are dependent on daily wages either from agriculture or non-agricultural activities have higher odds of not being in school and working in domestic work as compared to the girls of self-employed households where source of income is relatively stable.

(iv) Finally, girls from poor households have higher odds of being engaged in household chores as compared to girls from non-poor households.

(v) Girls from households whose head is illiterate or has low level of education are more likely to be engaged in household chores without being in school. Educated parents are able to help their children through the schooling process as they would value the experience more and encourage their own children to attend school.

‘Nowhere’ Children

The following section examines the odds of children not working and neither in school given the variation in social groups, landholding size, livelihood categories, poverty level and education of the head of the household.

Gender of ‘Nowhere’ Children Reference – ‘Females’

It has been found that boys are 1.10 times likely to be not working nor attending school as compared to girls. Girls work in high proportions in domestic work.
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Social Groups Reference – ‘Others’

a) SC : have 1.75 times significantly higher odds of being ‘nowhere’.

b) OBC : have 1.92 times significantly higher odds of being ‘nowhere’.

Taking ‘others’ as the base case, it has been found that children from both the SC and the OBC have similar odds of being neither in school neither working. ‘Others’, on the other hand have lower odds of being not in school as compared to rest of the social groups. Hence, we find that likelihood of children not attending school nor working do not change significantly with respect to caste.

Landholding size Reference – ‘Very Large Landholding’

a) Landless : have 2.71 time’s significantly higher odds of not being in school neither working.

b) Marginal : have 2.04 time’s significantly higher odds of not being in school neither working.

c) Small : have 3.63 time’s significantly higher odds of not being in school neither working.

d) Medium : have 2.01 time’s significantly higher odds of not being in school neither working.

e) Large : have 0.35 time’s significantly higher odds of not being in school neither working.

The logistic regression output with the reference category ‘very large landholdings’ indicates that children belonging to economically vulnerable households i.e. with no land or with extremely small size of land have higher odds of not being in school or at work as compared to the children from households having larger landholding size. In fact, children belonging to households owning land between 1 to 2.5 acres have the highest odds of not being in school neither at work. As against this, children from household owning 5 to 10 acres of land have the lowest odds of not being in school neither at work as compared to the rest.
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Household Type: Reference-'Self Employed in Agriculture'

a) SENA : have 2.05 time's significantly higher odds of not being in school neither working.

b) AL : have 2.31 time's significantly higher odds of not being in school neither working.

c) OL : have 6.25 time's significantly higher odds of not being in school neither working.

d) OTH : have 0.26 time's significantly higher odds of not being in school neither working.

The logistic regression is carried out by using self-employed in agriculture as the reference category as it is usually the case that self-employed households have relatively stable income as compared to the households earning daily wages. The regression output indicates that children belonging to households dependent on daily wages from non-agricultural occupations have the highest odds of not being in school or at work followed by the children from households dependent on daily wages from agricultural occupations. Children from households self-employed in non-agricultural activities have the next highest odds of not being in school or at work. Children from households who are dependent on cultivation have the lowest odds of not being in school or at work as compared to rest of the households.

Literacy level of the Head of the Household Reference – ‘Literate’

a) Illiterate : have 2.72 times significantly higher odds of being ‘nowhere’ as compared to the literates.

b) Primary : have 1.22 times significantly higher odds of being ‘nowhere’ as compared to the literates.

c) Middle : have 3.75 times significantly higher odds of being ‘nowhere’ as compared to the literates.
d) Secondary and Higher Secondary : have 0.00 times significantly higher odds of being ‘nowhere’ as compared to the literates.

e) Graduate and Above : Reference Category

The logistic regression output for ‘nowhere’ children versus the educational level of the head of the household indicates that the odds of children not being in school nor working are 2.72 times higher for those whose head is illiterate as compared to those where the head of the household is literate. Among the children whose household head is literate, the odds of a child being not in school or working is the highest for those who belong to households where family head is educated up to middle level, followed by those girls who belong to households where family head is educated up to primary level. Thus, among the ‘nowhere’ children we do not observe a clear relationship between the educational level of the household and the attendance in school of the children.

To sum up this section, the estimation results indicate that:

(i) Likelihood of children being ‘nowhere’ is similar for both the SC as well as the OBC.

(ii) Children from economically vulnerable households i.e. households who have no land or very small landholding and who are dependent on daily wages are more likely to be not in school nor at work as compared to children who belong to larger landholding households who have stability in their income (self-employed).

(iii) Children from poor households have a higher likelihood of not being in school as compared to children from non-poor households.

(iv) Likelihood of a child being ‘nowhere’ is higher where family head is illiterate than a child who belongs to a household whose head is illiterate.

School Going Children

The aim of this section is to examine the odds of children being in school given the variations in social group, landholding size, livelihood categories, poverty level of the households and the educational level of the head of the household.
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**Gender Reference ‘Girls’:** Regression estimates indicate that boys are 1.81 times likely to be in school as compared to girls in rural Haryana.

**Social Groups Reference – ‘Schedule caste’**

a) OBC : have 1.80 times significantly higher odds of being in school than the rest.

b) Others : have 3.14 times significantly higher odds of being in school than the rest.

The odds ratio of school going children versus social groups indicates that children from the ‘others’ social group has the highest odds of being in school than children from the non-‘others’ social groups. Further, children from the OBC social group have the next highest odds of being in school as compared to the rest of the children. Children from the SC social groups have the lowest odds of being in school as compared to the rest of the social groups.

**Land size Reference – ‘Landless’**

a) Marginal : have 1.18 times significantly higher odds of being in school than the rest.

b) Small : have 1.41 times significantly higher odds of being in school than the rest.

c) Medium : have 1.99 times significantly higher odds of being in school than the rest.

d) Large : have 3.85 times significantly higher odds of being in school than the rest.

e) Very Large : have 5.69 times significantly higher odds of being in school than the rest.

On regressing landholding size on the dependent variable, the results show that the children from household of very large landholding have the highest odds of being in school. A next highest odd for children being in school is observed in households with large landholding size. From the regression output it is evident that the odds for children being in school increases with an increase in the size of landholding. This indicates that size of
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landholding has clear implication on the education of children. Larger landholding size implies larger asset base for the households which in term is reflected in higher income in these households. Hence, likelihood of children going to the school is higher in the economically better off households where holding size is large.

Household Type Reference – ‘Agricultural Labourers’

a) SEA : have 3.12 times significantly higher odds of being in school than the rest.
b) SENA : have 1.96 times significantly higher odds of being in school than the rest.
c) OL : have 0.79 times significantly higher odds of being in school than the rest.
d) OT : have 7.16 times significantly higher odds of being in school than the rest.

Taking the households dependent on wages from agriculture as the base case, it is found that children from regular salaried households have the highest odds of being in school. After these households, children belonging to households self-employed in agriculture have the highest odds of being in school. Next, the odds are the highest for children who belong to households employed in non-agriculture of being in school. It was also found that children belonging to dependent on daily wages from agriculture or non-agricultural activities have the lowest odds of being in school. Hence, stability in income in the household has a positive affect on the schooling of children in rural areas of Haryana.

Poverty Reference – ‘Non-Poor’

The coefficient estimates for school versus poverty level indicate that children from the non-poor households are 5.47 times likely to be in school as compared to the children from poor households. Hence, odds of children from non-poor households to be in school are higher than the children from poor households.

Educational Level of the Head of the Household: Reference – ‘Illiterate’

The logistic regression output for school going children and educational levels of the head indicate a fairly strong association between schooling and parental education – children from households where family head is literate have 4.44 times likely to be in school as compared to those who belong to households whose heads of the household are illiterate.

To sum up, it is evident from the logistic analysis that boys are more likely to be in school as compared to girls. The size and significance of the estimated coefficient of the child
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gender variable confirm the strong gender bias against girls schooling in rural Haryana. Children of both sexes from the backward classes are less likely to attend schools than other children. The larger landholding size coefficient confirms the strong negative link that exists between schooling and size of the landholding of the household. The households with larger holding size are economically better off than the households with small landholding. Further, self-employed household are associated with regular income and are the least exposed to income shocks while daily wage labour has very uncertain earnings. This is reflected in the schooling of the children of these households. Children from self employed households are more likely to attend school as compared to the children from wage labour households. Finally, the likelihood of a children to be in school from non-poor households is higher than the children from poor household, thus, confirming the strong negative link that exists between schooling and poverty.

Section II

The following section has been devoted to examine the influence of selected demographic, social and economic characteristics on child labour, child work, 'nowhere' children and child schooling when other variables that influence child behaviour are controlled.

Table 7.1 presents the parameter estimates of logit regression of a child's participation in an economic activity on a selection of demographic and socio-economic characteristics. The estimation was preformed on a data set consisting of 26,22,449 observations on children. Table 7.1 also contains regression results to alternative definition of child labour. The following social and economic characteristics explain the incidence of child labour. These are listed in order of importance, based on the odds from the logit regression presented in Table 7.1.

(i) Ceteris paribus, a child in households with marginal landholding size is more likely to be involved in the labour force than other children. The size and significance of the coefficient of households of medium landholding size indicate that a child in medium landholding size household is also more likely to be involved in the labour force than other children. Between these two groups the children of households with marginal landholdings are at a greater risk of being in labour force than the children of the households with medium landholdings. This indicates a higher level of impoverishment
of the households with marginal landholdings who are more dependent on labour earnings of their children than others.

(ii) The size and high significance of the poverty coefficient in case of child labour confirms that household poverty is one of the main reasons for children entering the labour market.

(iii) Other things being equal, children from the schedule caste households are at a greater risk of entering the labour market as compared to other children. Due to the size and the level of significance of marginal landholding coefficient, it is evident that incidence of child labour is high among the SC segment not because they are the lower caste but because these households operate marginal landholdings that makes them economically vulnerable.

(iv) Literacy levels of the households' head exert a strong positive impact on the propensity of the household to put its children into employment. The regression coefficient of the educational level of the head of the household indicates that children from households with illiterate heads are more likely to join the labour force.

(v) The economic development of a region also exerts an impact on the likelihood of a child being in the labour force. Children who reside in the less developed regions of rural Haryana i.e. Siwalik and Aravalli have greater propensity of being in the labour force. To corroborate this finding it was observed that households with medium landholdings whose children are in the labour force are found in the agriculturally less developed regions or rural Haryana.

Thus, it has been observed, *ceteris paribus*, low size of landholding and household poverty are the two most important reasons for children entering the labour force. These are followed by the social background, literacy level of the head of the household and the economic development of the region.

Table 7.1 (Column III) presents the coefficient estimates of the logit estimates of participation of girls in households chores. The following social and economic characteristics explain the incidence of child work. These are listed in order of importance, based on the odds from the logit regression presented in Table 7.1.

(i) *Ceteris paribus*, a girl in landless households or one belonging to households with marginal landholding size is more likely to be engaged in household chores than
other children. Between these two groups, girls from landless households are more likely to be involved in household chores. Thus, child work (like child labour) is distress induced in these (economically vulnerable) households. But the size and significance of the coefficient estimate of large landholding variables, when other things are equal, indicate that even girls from households that own 10 acres of land are likely to be engaged in household chores at the cost of their schooling. This therefore, suggests that *all child work* is not distress induced, since we observe a high probability of girls from large landholding households being engaged in household chores at the cost of their schooling.

(ii) Other things being equal, a girl from self-employed households (where income generation is more or less stable) are more likely to work in household chores as compared to girls from the rest of the livelihood categories.

(iii) The above results are further confirmed by the small size but significance of the poverty coefficient. Probability of a girl from poor households to be working in domestic work is relatively small as compared to girls from non-poor households.

(iv) Further, the low size but significant coefficient of the social group gives indirect confirmation to our earlier result that all child work is not distress related. The likelihood of a girl working in domestic chores is more or less similar from both the lower as well as the upper castes.

(v) The importance of educational level of the head of the household in determining the girl’s involvement in domestic chores at the cost of their schooling is clearly reflected in its coefficient estimate. *Ceteris paribus,* a girl from households that have illiterate household head is more likely to be engaged in domestic chores as compared to girls from literate households.

In case of child work, *size of the landholding* and the *nature of occupation* of the household are the two most important factors in determining the girl’s involvement in household chores at the cost of their schooling followed by poverty of the household.

Table 7.1 (Column IV) further presents the coefficient estimates of the logit regression output of children who are not in school nor they are working: the 'nowhere' children on a selection of his/her individual and family characteristics in order of their importance. The following are the conclusions:
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(i) *Ceteris paribus*, a child in a wage labour household is more likely to be not going to school and neither working.

(ii) That the primary reason for this is the higher level of impoverishment of these economically vulnerable household is evident from the size and significance of the poverty coefficient estimates. Thus, given the economic obstacles that limit the income earning opportunities of their adults, children in these households are unable to attend school and probably do not work because of lack of it in the village. Since these children belong to economically vulnerable households, they form the reserve pool of child labour.

(iii) The coefficient estimate of the impact of parent's education on child work indicates that children from illiterate households are more likely not to attend school as compared to children from household where the head of the household is literate.

(iv) Boys are slightly more likely not to attend school nor work as compared to girls.

(v) All other things being equal, children residing in the agriculturally less developed region of Aravalli are more likely not to attend school and neither work as compared to children in the agriculturally developed regions of rural Haryana.

Thus, parents' occupation, poverty level of the household along with the educational level of the head of the household determines the likelihood of 'nowhere' children.

Table 7.2 presents the coefficient estimates of the logit regression of a child's school enrolment on a selection of social and economic characteristics in order of magnitude of their coefficient. The following results are established.

(i) *All other things being equal*, the negative sign, size and significance of the poverty coefficient confirms the strong negative link that exists between schooling and poverty — economic deprivation is a major impediment to children’s education.

(ii) Positive effect of economic stability on schooling is also reflected in the coefficient estimate of land size of the household. Children from households with large and very large landholding size are more likely to attend school as compared to children from landless or smaller size of landholding households.
(iii) *Ceteris paribus,* children from wage labour households are less likely to be in school as compared to regular salaried households in rural Haryana. This further confirms the above statement that economic deprivation is responsible for non-attendance or discontinuation of studies of children.

(iv) Educational level of the head of the household significantly affects child’s schooling i.e. children from households where head of the household are literate are more likely to be in school than those from households where family head is illiterate. This mirrors the results, seen earlier, on the strong negative link between adult education and child labour.

(v) *Ceteris paribus,* estimated coefficient of the child gender variable confirms gender bias against girls schooling in rural Haryana. The size of that coefficient estimate of the gender variable is although small (Table 2) but significant.

(vi) Finally, it is worth mentioning that *other things being equal,* children from both genders from the SC households are less likely to attend school than other children. The size of the coefficient estimate of this variable is small but significant.

**Conclusion**

The estimated coefficients confirm the earlier observations that children from schedule caste are more likely than others to be in the labour force. Children from landless or households with marginal landholdings are more likely to be in the labour force. The nature of occupation of the household has an impact on the chances of a child to be involved in labour activities. Estimated coefficients indicate that children from wage labour households are more likely to be in the labour force as compared to the children of the households who are engaged in self-employed activities. Children belonging to poor households are more likely to be in the labour force as compared to non-poor households. Finally, regression output for the child labour versus the educational level of the head of the household indicate a strong association between education and child labour – children from households whose parents’ are illiterate are about two times likely to be involved in child labour as compared to children from households where parents’ are literate.

The regression output for *child work* reveals that among all the social groups, the SC child has the highest odds of being engaged in household chores as compared to the rest of the social groups. Further child work, as the regression results indicate, seems to be distress
induced as most of this comes from economically vulnerable households. Girls belonging to landless households have the highest odds of working in household chores as against the children from households with land. This gives an indication to the inverse relationship between child work and size of landholdings. Girls from households with marginal landholding have higher odds of being engaged in household chores at the cost of their schooling as compared to the households with larger landholding size. Moreover, girls from households who are dependent on daily wages either from agriculture or non-agricultural sector have higher odds of not being in school and working in domestic chores as compared to the children of self-employed households where source of income is relatively stable. Finally, girls from poor households are more likely to be working in household chores as compared to girls from non-poor households. It is important to mention here that all child work is not distress induced. The regression output indicates that girls from large landholding households who are usually self-employed in agriculture also have high odds of working in the household chores. It is evident that in such households girls do not go to school and only work at home because of non-economic factors. Parents’ education can reduce child work as we find that girls from households, whose head are illiterate, are more likely to be working at home and not go to school than the girls from households where the head is literate.

Finally, in the case of ‘nowhere’ children the logistic regression results indicate that the likelihood of children being ‘nowhere’ is similar for both the lower (SC) as well as the upper caste (OBC). Children from economically vulnerable households i.e. households who have no land or very small landholding size and the households dependent on daily wages are more likely to be out of school as compared to children who belong to larger landholding size. The estimated coefficients for poverty point out those children from poor households have a higher likelihood of not being in school as compared to children from non-poor households. Further, likelihood of a child being ‘nowhere’ is higher where head of the household is illiterate than a child who belongs to households where the head is literate.

Logistic results in Section II indicate, ceteris paribus, which are the most important factors that determine participation of children in the labour market, in household chores and in schooling. Economic deprivation of the household acts as a strong stimulus to children taking up work and losing out on schooling. Economic deprivation of the household is reflected in terms of small asset base (land and capital) and poverty. Coefficient estimates of
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indicators of economic deprivation like landlessness or smaller size of land operated and lack of regular source of income (i.e. wage labour) in households were found to be strong and significant. Further, poverty coefficient was found to be highly significant in the logit regression of child labour and child schooling. It was also observed that all other things being equal, a child from the lower caste is more likely to be involved in labour force and less likely to be enrolled in schooling than other children. Finally, rising levels of awareness of the adult members of the households as measured by their general education, act strongly to reduce child labour and increase child schooling.