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**SOCIAL NORMS, COORDINATION, AND POLICY ISSUES IN THE
FIGHT AGAINST CHILD LABOR**

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Abstract

The literature on the economic analysis of child labor is rich and insightful. There are, however, lines of research that should be encouraged. One of the main issues to be incorporated more seriously in the literature is the formal analysis of cultural and behavioral rules at the community level and their impact on household decisions, including child labor. A simple model of such type of interactions is shown in this paper. Also, more empirical evidence on the effect of social interactions is needed to move forward in the thorough analysis of social norms and economic behavior. In order to do that, more data and a different quality of data is needed. Finally, in terms of the policy perspective, it is important to emphasize that reducing child labor is not the objective *per se*. The main objective is to relax some important constraints on household decision-making to improve household welfare and, more important, to increase income-generation capabilities of the individuals in the future. That leads to the incorporation of other variables in the analysis which should not be neglected, namely, economic growth, regional development, and quality of schooling. As it has been the case historically in development economics, the literature on child labor has taught us a good deal about the microeconomics of development.

Keywords: Mexico, Child Labor, Stigma, Multiple Equilibria.
JEL Classification: J13, I31, J22, O12

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1.　　Introduction

The issue of child labor has been extensively analyzed in recent years. The paper presented by Brown, et. al. (in this issue) is a thorough and very complete survey of the analysis of determinants, consequences, and possible solutions to the problem. The paper presents evidence on policy experiments dealing with this phenomenon, discussion that is especially useful and illuminating. There are, however, some points that would be presented in this paper to emphasize additional lines of research, as well as policy implications that should be considered to complete the picture.

2. The Role of Social Norms

An issue that has been ignored, to a certain extent, in the literature is the role of cultural aspects influencing child labor decisions. Specifically, the role of different types of informal social norms that might have an important effect on child labor incidence. I will discuss here two examples, namely, norms of filial obligations and norms of "social stigma" or social disapproval of parents who send their children to work. The latter idea has been proposed by Hirschman, as mentioned in Brown, et. al., and also briefly discussed in Basu (1999).

2.1 Filial Interactions

There are two issues not discussed in Brown, et. al. which have shown to be important according to recent research. First, the so-called "intergenerational child labor trap", first discussed in Basu (1999) and later extended in Emerson and Portela (2000). The latter shows robust empirical evidence using Brazilian data. Controlling for relevant socio-economic characteristics, children whose parents started working at a young age tend to start working earlier in their lives. Though not the main explanation provided by the authors, it has been argued that a cultural norm could be playing a role here, namely, the fact that parents who started working early consider that a value and something that is good for the education of their children –given that those kids could also be in school.

There are also communities, especially in rural areas, where the children´s contribution to family work is a well-established cultural value.[1]

Another type of filial interaction is related to social security for old-age among the poor. Lopez-Calva and Miyamoto (2002) show that a filial obligations contract can be sustained as an intergenerational equilibrium, but the type of care parents receive during old-age will depend on human capital investment in their own children. If the production of care for the old has a Cobb-Douglas type in which the inputs are time and monetary transfers, it can be shown that, depending on technological and productivity parameters in the economy, you may end up in either an equilibrium with low-child labor and money-intensive transfers or one with high child labor incidence and time-intensive care. Just as an illustration, figure 1 shows the incidence of co-residence –time-intensive care-- and child labor in low-income versus more developed countries, which tends to support this idea.

The discussion on norms should not be understood as an alternative to a typically rational, children-as-assets type of analysis. Rather, we suggest this is an additional route to understand fully the phenomenon. One has to also consider that, at the end, social norms might also be endogenous to the set of economic conditions in the longer run.

2.2 Social Stigma

This section shows a simple example to show the multiplicity of equilibria arising through the social convention that imposes a social cost on those that send their children to work. An extended model is in Lopez-Calva (2002). Also, empirical evidence from Mexico, using the National Urban Employment Survey from 1994 to 1998, shows that such hypothesis cannot be rejected.

Stigma models have been previously used in the literature to analyze different issues like the welfare system (Besley and Coate, 1992 ; Lindbeck, et. al., 1998) and crime incidence and its persistence (Rasmusen, 1995). The internalization of such kind of norm into the preferences becomes a self-enforcement mechanism. People may incorporate certain rules into their preferences and norms prevail through feelings of embarrassment,

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[1] Such is the case of the Andean regions of Peru, as shown by anthropological work.

anxiety, guilt, and shame when they violate them (Elster, 1989; Akerlof and Kranton, 2000). Disapproval by members of the group a person belongs to may reduce that person's welfare by affecting the sense of belongingness, her identity. Akerlof and Kranton (2000) introduce a utility function that depends on:

1) Consumption of goods and services,

2) The individual's own actions and *the actions of others*,

3) A given "prescription" (something that *should* or *should not* be done, i.e, a norm).

This is the type of effect that can be modeled as a "stigma." There are other forms of enforcement mechanisms, as in the case where the convention requires a punishment or "social sanction" by the community in order for the norm to be sustainable, within a folk theorem type of argument (Coate and Ravallion, 1993). Yet one alternative role norms may play in economic interactions is that of focal points in interactions with multiple equilibria. Those are called "equilibrium-selection" norms (Basu , 2000

As mentioned above, let us assume there is a social norm that says that should you send a child to work, you shall be considered a bad parent. Sending a child to work produces embarrassment --a *social stigma* cost-- that is reflected in lower utility. That embarrassment, however, will be lower the higher the proportion of people that are violating the norm. The higher the level of child labor in the economy, the lower the social stigma cost, for a given level of child labor supply of a specific household.

In the model, the aggregate level of child labor, E, shall be taken as given by individual households. The effect of one individual's decision on the aggregate variable is seen as negligible by the concerned decision-maker. The expectation of what the aggregate level would be, though, will influence the optimal level of child labor for the decision-maker in the household.

Let us suppose that we have N households in the economy, each one composed of one adult and one child. The general specification of preferences is given by a utility function whose arguments are total household consumption (c), the child's effort level, $e \in [0,1]$, denotes the fraction of the child's non-leisure time spent at work), number of hours at work), and the aggregate level of child labor in the economy, E, $W = W(c, e, E)$.

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The last two arguments are related to what will be termed "stigma cost." It will be assumed that the utility function is separable in consumption and "stigma cost," the latter being a function of e and E. The social stigma reduces the parent's utility. There will be one decision maker in the household, the parent, following the tradition of the unitary model (Becker, 1965). The problem of the parents is then:

$$Max_{c,e} W(c,e,E) = U(c) - S(e,E) \qquad (1)$$
$$\text{s.t.}$$
$$c \leq w + w_c e \qquad (2)$$

where the wages of the adults and the children are w and w_c, respectively. Both w and w_c are later determined endogenously, though each household treats these (as well as E) to be given. The assumption on the functions $U(c)$ and $S(e, E)$ are $U_c > 0, U_{cc} \leq 0, S_e > 0, S_{ee} \geq 0$, $S(0,E) = 0$, $eS_E \leq 0$, and finally $S_{eE} < 0$, i.e., the marginal disutility from child's effort is decreasing in the total amount of child labor in the economy. The first four assumptions are standard; $S(0,E) = 0$ captures the fact that stigma cost is zero if the child is not working. The latter implies that if $e = 0$, then $S_E = 0$. The condition $eS_E \leq 0$ implies that if $e > 0$, $S_E \leq 0$. In other words, an increase in aggregate child labor weakly diminishes the stigma cost, provided that the child is working in the first place. Note that thsese assumptions imply that $S(e,E) > 0$ whenever $e > 0$. Therefore, it is being assumed that even if E is very large, as long as one child's works the stigma cost does not vanish. Thus, child labor is not a value neutral activity with reward for keeping up with the Jones. It is something that society considers to be inherently "bad."

Clearly, the constraint will always be binding, since $U_c( ) > 0$. Hence, we may insert (2) into the utility function of the agent, (1), and obtain the first order condition

$$U'(w + w_c e)w_c = S_e(e,E) \qquad (3)$$

which simply states that the marginal benefit of an extra unit of child labor supplied in the market, measured in terms of utility from extra consumption, has to equal the

marginal cost, as given by the stigma to be borne by the parent, as a function of individual and aggregate child labor supply. From (3), it is possible to obtain the optimal amount of child labor hours supplied by the individual household, given by $e^*(w, w_c, E)$. Hence, the agent considers the wage rates and the *expected* level of child labor in the economy, E, in order to optimally choose the number of hours that her child should work.

The aggregate level of child labor in the economy in equilibrium, E^*, must satisfy a natural aggregate consistency requirement (Basu, 1987; Becker, 1991; and Lindbeck, et. al., 1998). The consistency requirement shall be termed "rational expectations property." The set of E that satisfy such a property is defined as

$$\mathbf{y}(w, w_c) = \left\{ E \mid E = Ne^*(w, w_c, E) \right\}$$

Let us now turn to the description of firms. Firms maximize profit using a production function whose only input is "effective" units of labor, i.e., adult and child labor corrected by the adult equivalence parameter, γ, which tells us how productive is a child as compared to an adult. In other words, it is being assumed, for analytical simplicity, that adult labor and child labor are substitutes, subject to an equivalency correction.

Thus, for a firm that employs A adults and C children, its effective labor input is $L \equiv A + \mathbf{g}C$. Given the assumptions, it is obvious that if $\mathbf{g}w < w_c$, no firm will employ children and if $\mathbf{g}w > w_c$ no firm will employ adults. Hence, whenever adults and children work, $\mathbf{g}w = w_c$. From now on, it will be assumed, without loss of generality, that this is the case. Then, whenever it is said that the adult wage is w, it should be presumed that child wage is $\mathbf{g}w$.

With this in mind, notice that if the wage is w, then the representative firm maximizes $\mathbf{p} = f(L) - wL$, and the first order condition is simply $f'(L) = w$. Assume there are constant returns to scale, so that profits are equal to zero. The optimal amount of effective units of labor demanded is

$$L^* = f'^{-1}(w) \tag{4}$$

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Without loss of generality, let us assume that this economy has only one firm. We are now in a position to define an equilibrium. Intuitively, an equilibrium is a situation where the demand for child labor is equal to its supply, the demand for adult labor equals the demand of adult labor, and the amount of child labor satisfies the rational expectations property.

The *equilibrium* for this economy can now be defined formally as a triple (w^*, w_c^*, E^*) such that:

(i) $\boldsymbol{g}w^* = w_c^*$

(ii) $E^* \in \boldsymbol{y}(w^*, \boldsymbol{g}w^*)$, and

(iii) $N + \boldsymbol{g}E^* = f'^{-1}(w^*)$

Condition (ii) above establishes that the aggregate level of child labor must satisfy the rational expectations property at the equilibrium, i.e., parent's choice of e, given wages and expected level of E, must result in E^*. The third condition, (iii), is the market clearing in the labor market, in terms of effective units of labor. The wage w^* must be such that the firm's demand equals the summation of N (adult labor supply) and total child labor supply in effective units, $\boldsymbol{g}E^*$.

In order to show in a simple way the multiplicity of equilibria introduced by the social interactions in this model, let us assume that $U(c) = \ln(c)$. Using this specification of $U(c)$ has the advantage that the optimal supply of labor will be independent of the level of wages, which will allow us to illustrate the main result in a simple manner. In the next section, this specification is changed so as to incorporate the interaction with wages. The first order condition is as follows,

$$\frac{\boldsymbol{g}}{(1+\boldsymbol{g}e)} = S_e(e, E) \tag{5}$$

It is easy to show that the model yields strategic complementarity in terms of child labor supply, for any positive level of e. In this case, strategic complementarity depends on the sign of $\dfrac{de^*}{dE}$, which can be obtained by totally differentiating (5):

$$\frac{de^*}{dE} = -\frac{(1+g e)S_{eE}}{g S_e + (1+g e)S_{ee}} \geq 0 \qquad (6)$$

and this will be a strict inequality for $e > 0$.

Thus, under the reasonable assumptions made above, to wit $S_{eE} < 0, \quad S_e > 0$, and $S_{ee} > 0$, strategic complementarity obtains. Expectations regarding what the aggregate level of child labor in the economy will be, i.e., what the others will do, affect each individual's decision and thus the outcome, opening the possibility of multiple equilibria. The response of the agents to the expected aggregate level of child labor derives in multiple rational expectations equilibria, shown as points A, B, and C in the figure. The social effect is introduced by the norm, given that the adult's expectation of E determines the expected stigma cost --"embarrassment" level-- she will face at a given e.

The possibility of multiple equilibria in the labor market is shown in Figure 2, for a given shape of the stigma cost.[2] The horizontal axis is in units of x, which is defined as aggregate child labor measured in adult equivalence, $x = g E$. The distance 0A in the quadrant below is equal to N, and represents the fact that parents supply their labor inelastically. The main quadrant shows the points that satisfy the rational expectations property for E, points A, B, and C. The vertical axis represents the total amount of effective child labor supplied as a response of the expected aggregate level, E, for given wages. The total amount of effective child labor supplied as a response of the expected aggregate level is obtained by correcting for adult equivalence the optimal amount supplied by the individual household, and multiplying it by the number of households, N.

The quadrant below in figure 2 is the one that depicts the market clearing in the labor market, showing the demand for effective units of labor, $L^* = f'^{-1}(w)$, as well as the supply. The supply is inelastic with respect to wages and determined by the expectations about E (see first order condition). The two stable rational expectations equilibria are A and C. These determine two stable equilibria in the labor market, A` and C`, as shown in the quadrant below.

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[2] It is important to mention that a linear specification of the stigma cost, given that e is bounded both from above and below, would result in the same multiplicity.

The main result thus obtains:

1) One equilibrium is at C`, where wages are low and children work; and

2) A second equilibrium is represented by A`, with high wages and no child labor.

This result derives directly from the social stigma attached to parents who send their children to work, and the quite realistic assumption that such an "embarrassment" decreases as the proportion of children working in the economy increases. Thus, a social norm, sustained through social pressure, derives in a coordination problem.

The existence of multiple equilibria is robust to different specifications of the demand for labor. Suppose this is a small, open economy, which implies that the labor demand is perfectly elastic at a given wage level, D''. The two stable equilibria are then A'' and C''. The existence of multiple equilibria is robust to that specification, as opposed to the model in Basu and Van (1998). An extension where the wages affect the set of rational expectations equilibria is developed in Lopez-Calva (2002).

But the discussion on whether such effects exist is an empirical question. As discussed in Brown, et. al., there are basically three econometric models in the literature for dealing with the work/school multiple choice problem: bivariate probit, multinomial logit and sequential probit. Tables 1 and 2 show the bivariate probit and sequential probit models analyzing child labor and schooling decisions in Mexico for the period 1994-1998. A more extensive discussion of similar results for Mexico and Venezuela is in Freije and López-Calva (2000).

The empirical test uses the National Urban Employment Survey (ENEU) for the period 1994-1998. This survey is representative of the 41 largest urban areas in Mexico since 1993. It includes micro-data on household characteristics, work status, wages, and demographic characteristics of the household, with individual information for all family members 12 years old and above. A working child will be defined as a family member who is between 12 and 16 years old and worked positive hours, for a salary, during the week of reference. Compulsory schooling in Mexico goes up to secondary school, the equivalent, on average, to 15-16 years of age. Also, the Law does not allow to work until such age. The options given in the questionnaire of the survey, in addition to asking the number of hours worked and salaries received, can be grouped into four categories: a)

only going to school, b) going to school and working, c) only working, and d) neither studying nor working.

The results show a robust effect of what we hereby defined as the "social interaction". Child labor incidence is calculated at the lowest level of aggregation, called "basic sampling area" (AGEB). Higher incidence of child labor among the neighbors has positive and significant effect on the child´s probability of participation, controlling for all possible economic and demographic variables. The opposite is true for the case of average school attendance. Manski (2000) has criticized this kind of analysis of social interactions arguing that it would be necessary to have "subjective data for subjective concepts". Also, we might think of other variables whose effect could be picked up by the variable being used here –for example, school quality in the neighborhood. However, given the available data, it is clear that the effect of social interactions is an issue which should be studied more carefully if one is to implement effective policies against child labor.

3. A Comment on Policy

Brown, et. al. discusses evidence on the effect of specific policies to eliminate child labor. One of these policy experiments is the case of the PROGRESA program in Mexico. It is very important to emphasize that such kind of direct interventions, in which the government gives transfers to the families to compensate for the economic loss of school attendance of their children, have proven quite succesful. By 2002, there are eight different countries in Latin America with PROGRESA-like interventions. One of the main advantages of PROGRESA is the fact that the evaluation of the program was conceived and designed as part of the program itself, which has allowed a statistically robust analysis of its effects. It is true as well that the effects have been measured in a static fashion, when some of the expected benefits are by definition long-run effects. More appropriate evaluation will be needed in the future to capture the long-run effects of the program, given that the elimination of child labor, though important, is not the main goal *per se*. The main point is to evaluate whether the elimination of child labor and a higher educational attainment would indeed result in higher individual welfare of the children involved. That long-run effect is yet to be assessed.

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4. Concluding Remarks

The literature on the economic analysis of child labor is rich and insightful, as shown in Brown, et. al. There are, however, lines of research that should be encouraged. One of the main issues to be incorporated more seriously in the literature is the formal analysis of cultural and behavioral rules at the community level and their impact on household decisions, including child labor. A simple model has been shown in this chapter. Also, more empirical evidence on the effect of social interactions is needed to move forward in the thorough analysis of social norms and economic behavior. In order to do that, more data and a different quality of data is needed. Finally, in terms of the policy perspective, it is important to emphasize that reducing child labor is not the objective *per se*. The main objective is to relax some important constraints on household decision-making to improve household welfare and, more important, to increase income-generation capabilities of the individuals in the future. That leads to the incorporation of other variables in the analysis which should not be neglected, namely, economic growth, regional development, and quality of schooling. As it has been the case historically in development economics, the literature on child labor discussed in these chapters has taught us a good deal about the microeconomics of development.

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Figure 1

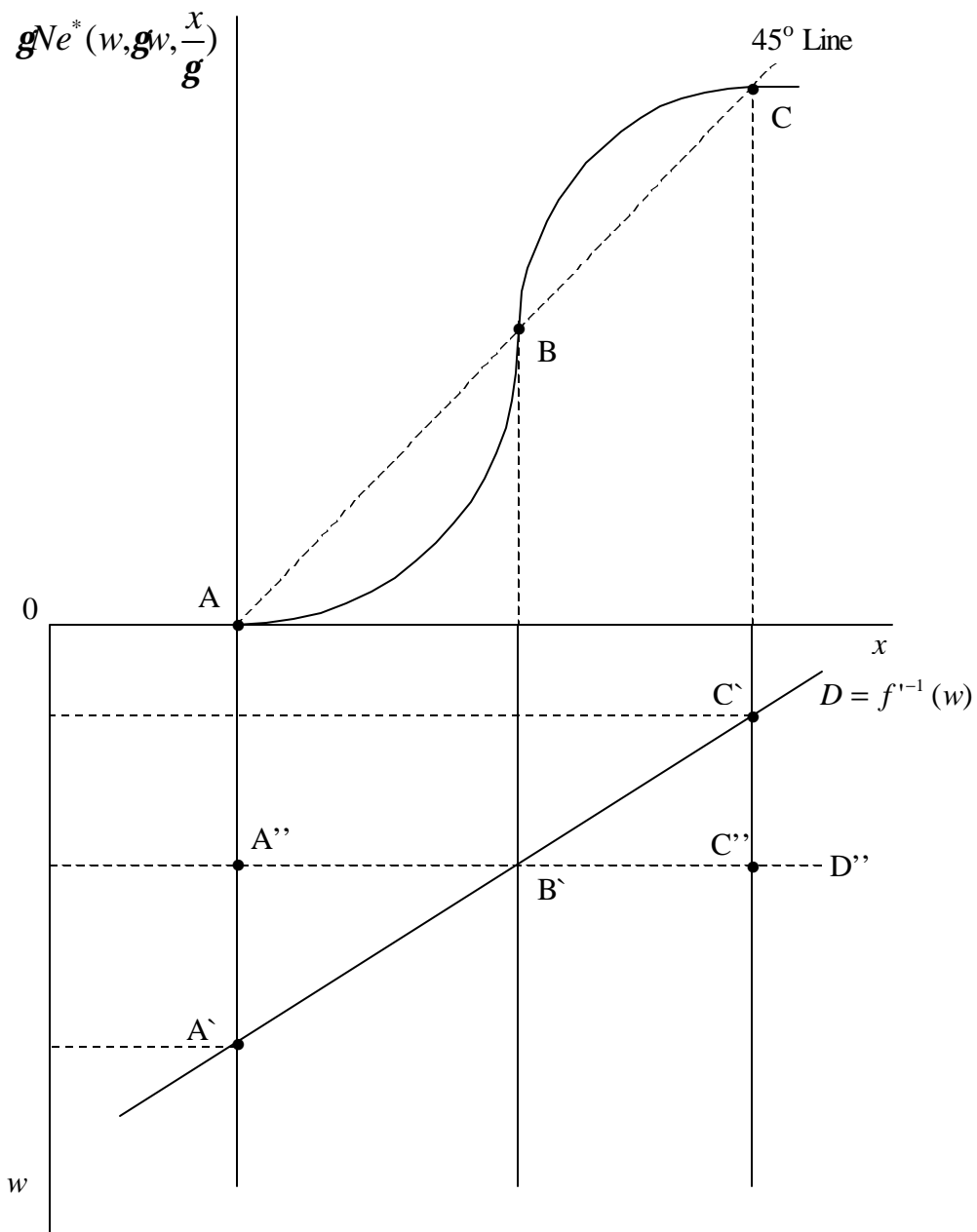**Member of household aged 60 and over
living with grandchild**
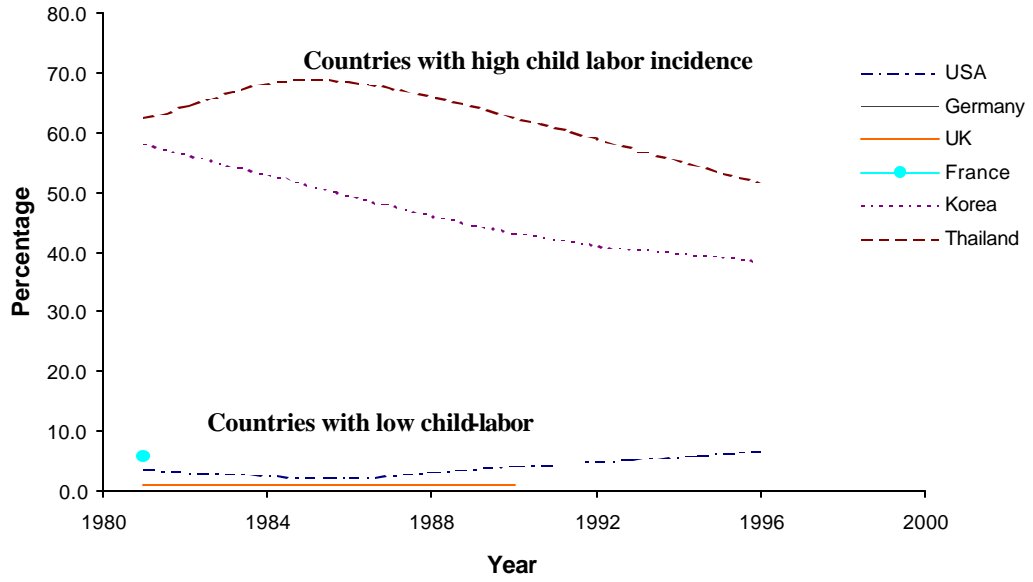
Figure 2
Rational Expectations Equilibria and the Labor Market

Table 1

Variables Used in the Bivariate Probit, Multinomial Logit and Sequential Probit Models

Child Occupation	
School5	Child attends school (final period)
Work5	Child works in the labor market (final period)
Worksch5	Child only goes to school=1, child goes to school and works=2,
	child only works=3, none of the others=4 (final period)
Onlysch5	Child only goes to school=1 (final period)
Wksch5	Child goes to school and works=1 (final period)
Onlywk5	Child only works (final period)
Child Characteristics	
Age5	Age of child (final period)
Gender5	Gender of child, 1=male (final period)
Household Head Characteristics	
Headsex	Household head gender, 1=male (final period)
Headage	Household head age (initial period)
Headedu	Household head years of education (initial period)
Hdemp1	Household head employed in the government = 1 (initial period)
Hdemp2	Household head employed in the formal sector = 1 (initial period)
Hdemp3	Household head employed in the informal sector = 1 (initial period)
Hdemp4	Household head unemployed = 1 (initial period)
Headms	Household marital status, 1=couple, 0=single (initial period)
D_hdemp	Change in the household head employment status ,
	1= become unemployed, 0=no change (initial period)
D_hdms	Change in the household head marital status,
	1=change, 0=no change (initial period)
Household Characteristics	
Boy04	Number of boys age 0-4 in the household (initial period)
Boy59	Number of boys age 5-9 in the household (initial period)
Boy1013	Number of boys age 10-13 in the household (initial period)
Boy1416	Number of boys age 14-16 in the household (initial period)
Girl04	Number of girls age 0-4 in the household (initial period)
Girl59	Number of girls age 5-9 in the household (initial period)
Girl1013	Number of girls age 10-13 in the household (initial period)
Girl1416	Number of girls age 14-16 in the household (initial period)
Adul1759	Number of adults in the household (initial period)
Elder60	Number of elderly in the household (initial period)
Nopov	Household stays out of poverty
Staypov	Household stays in poverty
Fallpov	Household falls into poverty
Escpov	Household escapes from poverty
Wage1759	Median wage for adults, by state (initial period)
D_wg1759	Change in the median wage for adults
Ourate	Open unemployment rate, by state (initial period)
Hrwg1216	Mean hour wage for children, by state (initial period)
D_hrwage	Change in the mean hour wage for children
Schenra5	**Child school enrollment rate, by basic sampling area (final period)**
Laborin5	**Child labor incidence, by basic sampling area (final period)**
School	Child attends school (initial period)
Work	Child works in the labor market (initial period)

Table 2
Sequential Probit Results for 1994-1998

Variable	First Stage: Only School dF/dx	Robust Std. Err.	Second Stage: School and Work dF/dx	Robust Std. Err.	Third Stage: Only Work dF/dx	Robust Std. Err.
Child characteristics						
Age5	-0.0598**	0.0089	0.0079	0.0122	0.0640**	0.0160
Gender5	-0.0287	0.0229	0.0956**	0.0314	0.2038**	0.0408
Household head characteristics						
Headsex	0.0623**	0.0281			-0.0591	0.0510
Headage	0.0011	0.0014	-0.0024	0.0018	-0.0009	0.0023
Headedu	0.0153**	0.0022	-0.0007	0.0032	-0.0247**	0.0047
Hdemp1	-0.0144	0.0466	0.0137	0.0769	0.0451	0.0912
Hdemp2	-0.0022	0.0425	0.0045	0.0680	-0.0517	0.0740
Hdemp3	-0.1254**	0.0490	0.0272	0.0723	0.0227	0.0744
Headms			0.0696**	0.0287		
D_hdemp	0.0075	0.0692	-0.0610	0.0630	-0.1277	0.0683
Household characterisitcs						
boy04	-0.0272	0.0177	-0.0252	0.0247	0.0667**	0.0290
boy59	0.0156	0.0172	-0.0259	0.0249	0.0073	0.0320
boy1013	-0.0228	0.0151	0.0180	0.0195	-0.0538**	0.0253
boy1416	-0.0366**	0.0172	0.0317	0.0250	-0.0204	0.0327
girl04	-0.0534**	0.0210	-0.0282	0.0294	0.0316	0.0345
girl59	0.0016	0.0173	-0.0239	0.0244	0.0686**	0.0283
girl1013	-0.0227	0.0153	0.0204	0.0219	0.0364	0.0268
girl1416	-0.0239	0.0176	0.0709**	0.0237	0.0121	0.0331
adul1759	0.0070	0.0084	-0.0078	0.0119	-0.0006	0.0141
elder60	-0.0274*	0.0150	-0.0201	0.0217	0.0820**	0.0273
nopov	0.0165	0.0315	0.0334	0.0408	0.1211**	0.0527
staypov			0.0629	0.0667	0.0952	0.0873
fallpov	0.0341	0.0369				
escpov	-0.0090	0.0395	0.0115	0.0585	0.2328**	0.1005
wage1759	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001
d_wg1759	0.0000	0.0001	-0.0001	0.0001	0.0000	0.0001
ourate	-1.4806	0.9785	1.3664	1.3425	1.3516	1.8637
hrwg1216	0.0022	0.0140	-0.0073	0.0194	0.0191	0.0265
d_hrwage	0.0069	0.0164	0.0233	0.0224	-0.0070	0.0313
schenra5	**0.6626****	**0.1353**	**1.0830****	**0.1943**	**0.4680***	**0.2636**
laborin5	**-0.2087**	**0.2417**	**0.9598****	**0.3605**	**2.9993****	**0.4946**
Log likelihood	-1744.1571		-368.4466		-331.8698	
Wald Chi2	281.36		79.84		188.67	
Pseudo R2	0.0836		0.0974		0.2395	

** Significant at 95%

* Significant at 90%

Table 3
Bivariate Probit Results for 1994-1998

Variable	School5	Std. Err.	Work5	Std. Err.
Intercept	-0.7110	0.7272	-5.9313**	0.9176
Child characteristics				
Age5	-0.1129**	0.0321	0.2331**	0.0424
Gender5	0.0613	0.0845	0.4262**	0.1127
Household head characteristics				
Headsex	0.1292	0.0978	0.0016	0.1286
Headage	0.0020	0.0049	-0.0034	0.0062
Headedu	0.0389**	0.0079	-0.0688**	0.0110
Hdemp1	-0.0794	0.1766	0.1419	0.2203
Hdemp2	0.0085	0.1644	-0.0183	0.2001
Hdemp3	-0.2603	0.1692	0.3224	0.2032
Hdemp4	5.6576	23524.4100	-4.4122	30595.9100
D_hdemp	-0.4188*	0.2421	-0.6238	0.5305
Household characteristics				
Boy04	-0.1121*	0.0646	0.0618	0.0794
Boy59	0.0270	0.0612	-0.0648	0.0798
Boy1013	-0.0444	0.0541	0.0195	0.0679
Boy1416	-0.0455	0.0634	0.0309	0.0811
Girl04	-0.1977**	0.0747	0.2039**	0.0898
Girl59	-0.0066	0.0615	0.0513	0.0777
Girl1013	-0.0233	0.0557	0.1514**	0.0681
Girl1416	-0.0293	0.0636	0.1497*	0.0828
Adul1759	0.0362	0.0309	-0.0177	0.0368
Elder60	-0.0750	0.0539	0.1079	0.0696
Nopov	0.0584	0.1201	-0.1041	0.1496
Fallpov	0.1189	0.1437	0.3230*	0.1907
Escpov	-0.0031	0.1466	-0.0529	0.1825
Wage1759	0.0006*	0.0004	-0.0006	0.0005
D_wg1759	-0.0001	0.0002	0.0002	0.0003
Ourate	1.9286	3.8432	-2.6686	5.0799
Hrwg1216	-0.0566	0.0564	0.0791	0.0737
D_hrwage	-0.0316	0.0581	0.0929	0.0758
Schenra5	**2.3934**	**0.5450**	**-1.4433**	**0.6727**
Laborin5	**1.2898**	**0.8683**	**5.6262**	**1.1982**
School	0.1684**	0.0728	-0.1702*	0.0909
Work	-0.3743**	0.1095	0.7178**	0.1162
Log likelihood	-1797.6323			
Wald Chi2	406.52			
Rho	-.4154			
Likelihood ratio test of rho=0	Chi2(1)	69.693		

** Significant at 95%

* Significant at 90%