

DISCUSSION PAPERS IN ECONOMICS

Working Paper No. 01-16

Child Labor and Schooling in a Low Income Rural Economy

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$$n_p = n_s \cdot c_m \cdot c_f^{n_s} \cdot h_s^{n_s} \quad (4)$$

$$u_i = u_i(c_m, c_f, h_s; z_i) \quad i = m, f \quad (5)$$

$$z_i = \beta \cdot h_s \cdot c_m \cdot c_f \quad (6)$$

$$h_s = h(l_{ss}, b; s) \quad (7)$$

$$l_{ss} = p_b \cdot b \cdot c \quad (8)$$

⁴ We can think of a period in this model as the time span from birth of a child until the child is of school-age. The number of pre-school children, n_p , can be thought as the fertility outcome for each period,

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$$y = y(l_{ym}, l_{yf}, n_s l_{ys}; h_m, h_f, \dots; h_s = h(l_{ss}, b; s$$

$$l_{js} = l_{js}(n_p, n_s, s, z_m, z_f, h_m, h_f, \dots, m, \dots, = s, y \quad =)?$$

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¹⁰ Chiappori et al. (1998), for example, make use of the relative sex ratio as a proxy for the situation in the marriage market.

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¹¹ In the unitary model, for example, all that matters is total income and not its intra-household distribution (i.e. income pooling hypothesis).

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¹⁸ Of those children combining school and work, all but two report school as their primary activity.

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$$l_w = 1 \text{ if } l_w^* > \mu_w, 0 \text{ otherwise} \quad = / >?$$

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²¹ It is likely that parents do not report their children as working if the number of hours worked is low. As long as this threshold level of hours of work (μ_w) is the same for all households, (5.4) would be simply replaced by $l_w = 1$ if $l_w^* > \mu_w$, 0 otherwise, without affecting the results. However, if some parents deliberately misreport (i.e. they do not report the child to be working even when hours worked by the child is above μ_w), the resulting coefficient estimates are inconsistent (see Hausman *et al.* 1998). Despite its potential relevance, this issue will not be further explored in this paper.

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³⁵ The wage equation for mothers, however, is not estimated very precisely.

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Significance levels in parenthesis. Tests of unitary preferences are Wald test of joint significance. Tests of Pareto efficiency are non-linear Wald tests of equality of the ratio of effects of each pair of distributional factors across the school and work equations.

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The estimated correlation between the work intensity probit and the work participation probit, ρ , is not significant, indicating that there is no selection bias.

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Marginal effects are evaluated at the means of the variables, and represent percentage changes in the relevant probability resulting from a unit increase in the relevant variable (1% increase in the case of credit).

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